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INSIDE DOPE

by GEORGE F. TAUBENECK

Stories of the Week
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George Mason Leads the Field
Care and Feeding of Distributors
Bendix Abroad
Malcolm Bard Points a Moral

Stories of the Week

For a number of years we've been hearing about George Allen (not the Korotest George Allen!). This George Allen is the affable gee who was court jester to both Roosevelt and Truman, and who finally wound up as chairman of the RFC. (He is now a director of several large corporations.)

Mr. Allen has the reputation of being a mighty entertaining storyteller. Well, he is. Had a chance to hear him not long ago, and he's terrific. Here are some choice samples:

Last November, when Truman's unpopularity had touched bottom, a citizen wrote a touching letter to one of Mr. Allen's friends.

"If it's true that Mr. Allen is Truman's adviser," he penned, "he should either advise a better man or advise a man better."

Another:

At the opening of the school term last fall, three youngsters enrolled in a Washington kindergarten. Their names were Ickes Jones, Drew Pearson Jones, and John L. Lewis Jones. Intrigued by these names, the teacher wrote a letter to their mother asking why she had bestowed these interesting names upon her male triplets.

"I am Miss Jones, not Mrs. Jones," came the reply. "Can you think of any better names?"

Mr. Allen also wowed the boys with the tale about President Roosevelt and the pledge he made to "balance the budget and reduce government expenditures" during his 1932 campaign.

In the 1936 presidential race, this broken promise came back to haunt him. So he ordered his ghost writer, Sam Rosenman, to prepare a speech which would explain this forgotten pledge.

Mr. Rosenman didn't show up at the White House for awhile. Finally FDR sent for him.

"Did you think up an answer?" Roosevelt asked.

"Yes," replied Sam.

"Fine, fine. What is it?"

"Deny you said it."

Copeland Holds the Line

Ford and International Harvester have made the headlines nationally with their price reductions, and everybody has applauded. Quietly and without fanfare, however, a number of other corporations have sat on the lid of rising prices even when it hurt to do so.

Among these is Copeland Refrigeration Corp. of our own industry. When OPA was eliminated last Nov. 1, Copeland stuck to its guns. Believing that arbitrary price increases would be detrimental to good will and to the best interests of business as a whole, Copeland did not raise prices.

During the ensuing four months many models were shipped at a loss. In the meantime, a thoroughgoing cost study was made, and pressure was brought to bear upon suppliers to reduce prices of components. The result was a new price list which will reflect these reductions.

According to President Harry Thompson: "We are still committed to making further reductions in our pricing as promptly as we enjoy cost

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Appliance Prices Won't Rise Now, Westinghouse Says

PITTSBURGH—No price advance on home appliances is contemplated at this time by the Westinghouse Electric Corp., despite the 15 cents per hour pay boost granted employees represented by the United Electrical, Radio & Machine Workers, CIO, recently, B. W. Clark, vice president in charge of sales, has announced.

The Westinghouse contract with the union calls for an 11½ cents raise in hourly rates. The remaining 3½ cents will cover the cost of six paid holidays, improved vacation benefits, and "other economic factors," it is said.

In outlining the new Westinghouse price policy, Mr. Clark indicated that some lines of apparatus other than home appliances will require some price increase due to the wage raises.

He further announced that despite "uncertainty regarding manufacturing costs" and the pay boost, Westinghouse is "preparing to quote firm prices on all products where reasonably short delivery reduces the hazard."

"In many cases these prices will be made firm with no price increases," he asserted.

"Further study is being given now to other lines of products, especially producers' equipment, which may re-

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Trane Drops Escalator Clause for Orders

LA CROSSE, Wis.—The Trane Co. here, manufacturer of heating, cooling, and air conditioning products, has announced that all orders received for early delivery will be accepted at firm prices.

All escalator clauses, under which orders were billed at prices in effect at time of shipment and which have been in effect until now, have been removed.

Prices on Freezers Reduced \$25-\$100 by Loudon Mfg.

MINNEAPOLIS—Loudon Mfg. Co. here, is cutting prices of all its home and farm freezers from \$25 to \$100 effective May 1.

The price reductions are in accord with President Truman's request for a general lowering of prices, declared R. J. Loudon, president.

N.Y. Federal Reserve Asks Regulation W Be Kept

NEW YORK CITY—Reiterating its stand against "unrestrained use of instalment credit in periods of high activity and general optimism" as "likely to prove harmful, both to business and consumer," the Federal Reserve Bank of New York urges continuation of controls, similar to Regulation W, "flexibly administered" as a means of contributing "to efforts to combat instability of business and employment."

In its thirty-second annual report recently issued, the bank argues that control must be applied restrictively in periods when demands tend to outrun supply "and must be relaxed in periods when more freely available credit can contribute usefully to the maintenance of demand and thus to the maintenance of production and employment."

Although asserting that to expect consumer credit control, however wisely administered, to iron out the fluctuations in the consumers' durable goods industry would be to hope for far too much, the report adds that "it is not too much to expect that it can help to moderate such fluctuations."

New NCRSA Code Hits Kick-Backs, Salesman Piracy

RALEIGH, N. C.—To govern the conduct of distributors and dealers who are members of the National Commercial Refrigerator Sales Association, Inc., a 12-point code of ethics has been adopted by the group.

"Kick-backs" or side payments on trade-in deals are prohibited; pirating of salesmen will be considered "highly unethical"; a ban on misrepresentation in advertising are included in the code, which is part of the association's by-laws and articles of incorporation.

The by-laws and the code of ethics were recently formulated and are now being circulated to present and prospective members, announce George B. Herman, president, and A. J. "Jack" Edmundson, secretary.

Headquarters of the association are being maintained here at the offices of the secretary.

Objectives of the association include the solving or alleviating of the many problems faced by commercial dealers and distributors which are peculiar to their trade, according to a booklet which NCRSA has just prepared to outline the association's policies and program. The booklet also features brief biographies of the officers and directors of the association.

Major objectives are stated as follows:

"1. To consider and deal with problems of management arising within the area of distribution, secure cooperative action in advancing the common purpose of its members, foster equity in business practices, and promote activities designed to enable the members to conduct their respective businesses with the greatest economy and efficiency.

"2. To improve relations between manufacturers and distributors, and to cooperate with the commercial refrigerator manufacturing industry on

(Concluded on Page 28, Column 1)

Zumbrun Is Brunner Managing Director

UTICA, N. Y.—With the retirement of G. L. Brunner, Sr. from the management of the Brunner Mfg. Co., A. G. Zumbrun becomes Chairman of the Board and Managing Director of the company. G. L. Brunner, Jr. continues as president.

Alfred D. Sullivan has been appointed Brunner chief engineer.

Mr. Zumbrun has been active in the company 22 years. He joined the company in 1925 as auditor, and was elected treasurer in 1933. In 1945 he became vice president and general manager.

The new chief engineer, Mr. Sullivan, joined the Brunner organization in March, 1945. Holder of a degree

(Concluded on Page 25, Column 1)

Frigidaire Promotes E. E. Landis, Van Scoyk

DAYTON—Two promotions in the service department of Frigidaire Division of General Motors Corp. in Dayton are being announced by H. F. Lehman, assistant general sales manager.

E. E. Landis, assistant service manager, has been promoted to service manager, succeeding Paul V. Sprout. Mr. Sprout has been appointed branch manager for the Frigidaire Sales Corp. in Albany, N. Y.

H. E. Van Scoyk, who has been in charge of service technical, will continue to serve as assistant service manager, but with broader responsibilities, Mr. Lehman explained. In addition to his regular duties, Mr.

(Concluded on Page 25, Column 4)

Trade Has Varied Reaction to 15-Cent Steel Wage Boost

DETROIT—The agreement between the CIO Steel Workers and the U. S. Steel Corp. calling for a wage increase of 15 cents an hour, has been greeted with mixed emotions by the refrigeration and appliance fields.

On one side, there is jubilation over the prospects of uninterrupted production of steel, which is still in short supply.

"Our big worry about production is over now," is the way one executive put it. It is known that lack of sheet steel had cut the refrigerator production of at least one major manufacturer by nearly 50%.

On the other hand, the wage increases would seem to cut off any hope of a cut in steel prices, and may even lead to an increase, which in turn will make it difficult to bring about a decrease in the price of consumer durable goods.

Kelvinator To Have Television Program

NEW YORK CITY—Kelvinator becomes the first regular television advertiser in the home appliance field when its new series of weekly television broadcasts begins over a four-city National Broadcasting Co. network, Wednesday, May 7, at 8:30 to 8:45 p.m.

Charles J. Coward, Kelvinator director of advertising and sales promotion, announced the new 15-minute series, "In the Kelvinator Kitchen," featuring Alma Kitchell, nationally known women's commentator. Cooking demonstrations by Mrs. Kitchell will be staged in a Kelvinator kitchen set, with the company's electric range, refrigerator, and home freezer playing functional roles.

Originating at the NBC television station, WNBT, in New York City, the Kelvinator program will be tele-

(Concluded on Page 25, Column 5)

New 'Deepfreeze' Models Drop 'Circular' Lines

NORTH CHICAGO—In making the first public announcement of its 1947 line, Deepfreeze Division of Motor Products Corp. revealed this week that it has abandoned the famous double-cylinder freezer and is now in production on a newly designed, chest-type unit.

Three models of the new freezer, said to be the result of more than two years of "the most thoroughgoing research," are being manufactured. Two (De Luxe Model C10-47 and Model B10-47) are of 10-cu. ft. capacity, while the third (De Luxe Model A5-47) has a capacity of 4.8 cu. ft.

The 3.66-cu. ft., single-cylinder

(Concluded on Page 4, Column 2)

Sears 'Automatic' Washer at \$209.95

CHICAGO—A new "automatic type" washer retailing at \$209.95 was introduced in Sears, Roebuck & Co. stores here last week.

Manufactured by the Nineteen Hundred Corp., the new Sears washer uses the agitator principle. It is claimed to wash and rinse nine pounds of clothes with 16½ gallons of water.

Principal feature of the "Kenmore" washer, as it will be trade-named, is a "suds saver" device, which permits the suds from one wash to be drawn off into the laundry tub and saved for an automatic return, if desired, for another wash.

'Unjust' Returns Violate Law, Patman Says

Mfr. Can Turn Down Some
Cancellations, Co-Author of
Robinson-Patman Act States

NEW YORK CITY—"Unjust" cancellations or returns of merchandise violate the Robinson-Patman Act and the manufacturer who accepts such returns and the dealer who makes them are exposing themselves to the penalties of that law, in the expressed opinion of Representative Wright Patman of Texas who co-authored the act designed to prohibit discrimination of any sort between purchasers.

"You will be conforming to the spirit and letter of the Robinson-Patman Act if you refuse to allow a firm's order to be cancelled without adequate reason or if you decline to take back merchandise that fulfills all the requirements of a good delivery," Rep. Patman declared before a group of garment manufacturers here recently.

Rep. Patman's declaration strikes at a business practice which has been considered an expense necessary for the preservation of customer good will.

If upheld by the courts and put into practice by the Federal Trade Commission, the impact of this interpretation would be terrific, the Bulletin of the Electrical Institute of Washington has commented.

Much will depend on how "unjustified returns" are interpreted, but at best it will be a reversal of normal industry practice with respect to cancellations and returns, it added.

"It hits the appliance industry particularly hard, since durable goods are extremely vulnerable to returns practice, especially in view of the unstable conditions existing in the industry today," the Bulletin declared.

"Returns are reported to have been heavy lately in many categories and widespread cancellations are anticipated because of the slow movement of many appliances. This has manufacturers plenty worried and such an interpretation of the law would be a perfect out for them," the Bulletin said.

The garment trade, to whom Mr. Patman was talking when he exploded his "bombshell," is said to have called on the Federal Trade Commission for a clear cut statement on whether or not the Government will consider manufacturers who accept returns and the retailers who make them as violators of the law.

Refrigerator Dealers Out Of 'Newburyport Plan'

NEWBURYPORT, Mass.—The "Newburyport plan," a local campaign to "do something" about high prices by getting local merchants to pledge to refund their customers 10% of the list price on all but "fair traded" articles purchased during the 10 days following April 22, apparently was not extended to refrigerators and major appliances, it was learned last Thursday.

It was expected at that time, however, that price cuts might be made on radios.

The "Newburyport plan" was launched at a mass meeting of determined consumers and merchants during the evening of April 21. The cooperating merchants, said to have included nearly all in town by the next day, were required not only to chop 10% off the retail price of their goods but also to demand a similar reduction from their suppliers.

Sponsors of the plan hoped that their idea would spread to other communities and realized that it

(Concluded on Page 4, Column 1)

AFTER 17 YEARS OF RESEARCH The NAT Corporation of Kansas City

announces

THE NEW NAT

(self contained)

AIR CONDITIONER

The Nat Air-conditioning Unit is the only one on the market so constructed as to be easily serviced.

*The Answer to the
Service-Man's Prayer*

All working parts are accessible without having to tear down the cabinet. A saving of time and labor.



The LAST WORD in
Appearance and Performance

Finished Cracked Brown or
Hammered Grey Baked Enamel

Sold through exclusive dealers and distributors
some territory still open — inquiries invited

The NAT Corporation

2710 McGee Trafficway • Phone HA. 1892 • KANSAS CITY, MISSOURI

The Nat Corporation also manufactures the NAT Suspended Gas-Fired Unit Heater

The NAT Unit comes in 3 sizes:
3.0, 4.2 and 5.4 Tons

Hotpoint, G-E Presidents Talk It Over



James J. Nance (left), new president of Hotpoint Inc., is shown at the Chicago office with Charles E. Wilson, G-E president. One of Mr. Nance's first acts as head of the firm was to announce a \$10 million electric range factory.

Bendix Advertising This Spring Will Cost Total of \$1,000,000

SOUTH BEND, Ind.—Expenditures for newspaper advertising this spring in the cooperative program for Bendix Home Appliances, Inc., its 79 distributors and more than 8,000 dealers will aggregate \$1,000,000 it was disclosed here last week at the first of six factory sponsored advertising conferences with distributor advertising managers at the Oliver Hotel.

"Newspapers are the fundamental local advertising media in successful advertising," Walter J. Daily, advertising and sales promotion director, told distributor advertising men from New York, Chicago, Los Angeles, San Francisco, Philadelphia, Newark,

Detroit, Toledo, Boston, Pittsburgh, Washington, and Baltimore.

Soon to be launched in addition to advertisements currently appearing on the Bendix automatic washer is a series of large newspaper advertisements announcing the company's two new products, the Bendix automatic ironer and the Bendix automatic clothes dryer.

Forty-eight of the distributorships have their major newspaper campaigns on the Bendix washer under way and the balance will swing into action quickly.

In the strictly factory controlled "co-op" program, Bendix dealers pay half the cost of advertising in newspapers and other approved media and the balance is borne equally by the manufacturer and distributors.

Mr. Daily estimated that more than 25,000 newspaper mats will be used in the spring campaign. He stressed that newspapers are the major medium to be employed.

Wherever television is available, he urged conferees to make use of it for advertising the company's highly-demonstrable products. He predicted a bright future for television as an advertising medium.

Bank Urges Food Dealers To Air Condition Stores

PHILADELPHIA—Advertisements intended to induce food retailers to air condition their stores are being run in a local food trade journal by the First National Bank of Philadelphia, states Alexander Gunther, assistant vice president of the bank.

The advertisements point out to the food retailer the advantages of installing air conditioning in his store. They further declare that the obstacle of initial cost can be overcome by financing. They invite the retailer to the bank to discuss his air conditioning plans.

These advertisements will continue to run during the air conditioning sales season, Mr. Gunther stated. He said that advertisements which have already appeared have created some business for local air conditioning contractors.

The bank had previously set up an air conditioning display on its banking floor to interest its customers in air conditioning their places of business. (See March 10 issue of AIR CONDITIONING & REFRIGERATION NEWS.)

1st Quarter Report Shows Admiral Sales, Earnings Up

CHICAGO—Admiral Corp. and subsidiaries, leading manufacturer of radios and appliances, has reported large increases for the first quarter in sales and in earnings.

Sales for the quarter ending March 31 were \$9,852,133, and earnings, after all charges, were at an all time high of \$511,461. This was equivalent to 57 cents a share.

Last year's sales, for the same period were \$4,670,813, with net earnings of \$5,507.

Admiral will deliver about May 1, a complete new line of radios and radio-phonographs, and new low prices will be announced.

Advertising Splash

There's a splash in your pocket
with thousands of dollars in you

Try the 5-cent test...



and see why
Gemco
is tops in air
conditioning

Gemco
AIR
CONDITIONING

ADVANCED REFRIGERATING CO., INC.
WRITE! PHONE! WIRE!

One of the Gemco full-page advertisements in the New York Times.

Gemco Promotes Package Units Through Newspapers

ST. LOUIS—Firing the opening gun in its campaign to promote Gemco air conditioners through newspaper advertising, General Engineering & Mfg. Co. has begun a twice-a-week series of large displays in 25 distributor cities.

Key city for the campaign is New York where Advanced Refrigerating Co., New York and New Jersey distributor, reported "gratifying" results within hours after the first full-page advertisement appeared in the New York Times.

Copy stresses competitive features such as long wear, economy, and lack of vibration. Also emphasized is Gemco's accelerated production schedule, which permits early installation of the package units.

A similar advertising series has been running in several leading general magazines since March.

Gemco's year-round air conditioner, "Miracula" is scheduled for large-scale promotion in the late summer.

Emerson Radio Slashes 9 Table Models \$3-\$20

NEW YORK CITY—Price cuts from \$3 to \$20 on nine table sets were announced by the Emerson Radio & Phonograph Corp. here recently.

Applied to radios and radio-phonograph combinations that had previously retailed at more than \$30, the markdown was termed the first appreciable cut of its kind by a producer of nationally advertised merchandise.

Models adjusted in price are: four table radio-phonograph combinations reduced from \$99.95 to \$89.95; one radio-phonograph from \$119.95 to \$99.95; and five table models in the \$32.95 to \$36.95 price range have all been slashed to \$29.95.

Benjamin Abrams, president, in making the announcement, pointed out that no radios below \$30 would be reduced in price. Expressing confidence that price adjustments among components would be felt within 60 days, he admitted that the reduction in the retail price of the nine Emerson models would mean an actual loss to the company during the interim period.

Current production is said to be about 9,000 sets daily.

N.Y. Dept. Store Names Wheat

NEW YORK CITY—George Wheat has been appointed manager of the home furnishings operation of the Interstate Department Stores, Inc. according to an announcement by R. P. Bygel, executive vice president.

Formerly field supervisor for the company, Mr. Wheat succeeds Donald A. Sybert, who has become manager of the Carroll House store division.

FASTER on the draw



Looking for buried treasure? It's almost as easy to uncover as copper tubing. Penn is constantly increasing production attempting to meet the growing demand for 'Superior' tubing. At present, it's impossible to make deliveries until back orders are filled. Look to the future. Plan now to use 'Superior' for your tubing requirements. 'Superior' is better 4 ways -- it is easy bending, seamless, clean and bright, and positively dry.

Smart manufacturers and service men alike know that the tubing that saves time, trouble and money is 'Superior'. Available from 1" (o. d.) to capillary .093" (o. d.)

Be faster on the draw -- write today for further information and colorful literature.

PENN TUBING IS "SUPERIOR"

THE FLARING TOOL "that works like sixty"

The Papco #400 is a compact flaring tool that holds six sizes of tube and gives you a quicker, easier and better flare. Send for Bulletin.

GET YOURS NOW

PENN BRASS & COPPER CO.

ERIE, PENNSYLVANIA • Phone 35-111

We Manufacture XL 'Freon' Compressors and Condensing Units (1 to 10 h. p.)

Ammonia Compressors 4x4 — 5x5 — 6x6

Ammonia Valves 1/4" to 5" Screwed and Flanged

ALSO

Ammonia Flanges—Strainers—Discharge Check Valves

AIRCRAFT PRODUCTION ENGINEERS

DIVISION OF
THE XL REFRIGERATING CO.

1834-42 WEST 59th STREET

CHICAGO 36, ILL.

why RAYTHEON REFRIGERATOR FAN MOTORS

Stay Young So Many Years Longer!



It's the
**BALANCED
MECHANICAL
DESIGN!**

It's the
**HIGH STATIC
EFFICIENCY!**

It's the
**LOW NOISE
LEVEL!**

It's the
**LIGHTWEIGHT
ALUMINUM
BLADE!**

It's the
**OVERSIZED
OIL
RESERVOIR!**



5 BIG WAYS BETTER!

RUSSELL

ELECTRIC COMPANY

340 West Huron Street
Chicago, Ill.

On every score that counts in terms of long, trouble-free life and smooth, quiet efficiency under every conceivable condition—Raytheon Refrigerator Fan Motors have exactly "what it takes".

These precision-engineered refrigerator fans for compressor units are now available in two different types. One is equipped with a 6-blade fan, 7 $\frac{3}{4}$ inches in diameter—and the other is equipped with a 3-blade fan, 8 $\frac{3}{4}$ inches in diameter. Check with us now for complete information.

'Newburyport Plan'--

(Concluded from Page 1, Column 5) would only gain real significance if and when it did.

"This is not a mark down sale," Mayor John M. Kelleher explained. "This is a refund to the consumer, which retailers are making in an effort to bring into balance an economic machine which is seriously out of adjustment."

"In many instances merchants will be making this refund out of their own pockets. There will be an acute psychological danger if this plan fails to work."

John E. Swanson, merchant and former Rotary club president, who is said to have fathered the plan, declared, "With our inventories too high, and our customers holding off for lower prices, we decided to make gradual city wide price cuts before a real bust came later on."

Lagatella Heads Sales At G-E Cincinnati Branch

CINCINNATI—Richard M. Lagatella has been appointed sales manager of the Cincinnati Branch of General Electric Appliances, Inc., it has been announced.

Mr. Lagatella, who was formerly representative of the General Electric Co.'s household refrigerator division in Cleveland, has been closely connected with the refrigeration business since 1932.

After five years with the Ocheltree Electric Co., in Pittsburgh, he joined General Electric as sales manager of the water cooler division.

New 'Deepfreeze' Models Drop 'Circular' Lines--

(Concluded from Page 1, Column 4) freezer (Model A4) is being kept in the line to give the buyer a choice of design.

Deepfreeze also announced:

1. A new food protection plan available at no cost to the original purchaser of every freezer. This warranty, to cover a period to be announced later, will represent protection (\$5 to \$200) against food loss due to power interruption and electrical or mechanical failure.

2. A new five-year warranty on the sealed compressor mechanism. This covers a standard, one-year warranty on the entire machine, and a four-year replacement contract on the refrigeration unit.

3. A new national pricing policy.

4. Extensive advertising, sales, and public-education programs.

The new freezers are scheduled to be on display in dealers' stores throughout the country in about two weeks. They were shown first to wholesale distributors at three regional meetings in March. During April, the 63 distributors introduced the models to about 7,500 retail dealers at 69 distributing points.

Comparative prices of the new and old lines were given out as follows:

1947 Line	Price	1946 Line	Price
C10	\$439.50	B9-46B	\$443.50
B10	\$379.50	B9-46	\$433.00
A5	\$259.95	No Comparable Model	
A4	\$199.95	A4-46 To	\$214.50

All three of the new freezers are 36 in. high and 26 1/2 in. deep. Models C10 and B10 are 55 1/2 in. wide, while Model A5 is 38 in. in width.

Common features of the chest-type units include counter-balanced lids equipped with tumbler locks, temperature controls, toe space at the base, chromium-finished trim, and more than 4 in. of insulation. The one-piece, all-steel cabinets are bonded and finished inside and out with two coats of baked enamel.

According to Deepfreeze, the counter-balanced lids can be raised and lowered with finger-tip effort. They are said to stay open in any position desired, leaving both hands free to remove or place packages in the freezer.

The temperature control, located on the front of the cabinet, is described as "enabling the user to adjust with a turn of the wrist the temperature inside of the food compartments from 0° F. for storage to -10° F. for fast freezing."

Model C10 has a special fast-freezing compartment, as does Model B10. However, it is pointed out, foods may also be frozen in the storage compartment since the fast-freezing section "merely enables the user to freeze foods more quickly and eliminates the necessity of placing warm foods on top of foods already frozen."

Four features incorporated in Model C10 alone are a temperature indicator, storage baskets, ice cube trays and serving tray, and an alarm system.

Taking foods out of this model, the Division says, "is as easy as removing a book from the shelf."

"It is equipped with three removable metal baskets for the upper half of the storage compartments, and adjustable metal dividers for the

Rectangular-Shaped Deluxe Model



Lifting counter-balanced lid on top model in Deepfreeze's 1947 line of new rectangular freezers automatically turns on dual lighting system. Other features visible in this picture of 10-cu. ft. Deluxe Model C10-47 include fast-freeze and storage compartments, removable storage baskets, ice trays, automatic adjustable temperature control, temperature indicator, handle and lid lock, and toe space. Lid's inner liner is a lightweight plastic, called newest development in resisting moisture and condensation.

bottom half," it is explained. "Access to the bottom half of the compartment is accomplished simply by the removal of one of the metal baskets, as the remaining baskets slide from side to side on a special track arrangement."

"This model provides as standard equipment three large trays holding six pounds of ice cubes for extra ice cube capacity. An efficient ejector arm, on each, releases cubes as needed—two at a time or by the trayful—without the necessity of loosening them by running under hot water."

The temperature indicator on the front of the cabinet is intended to permit the user to tell at a glance the inside temperature. The automatic battery-operated alarm system is designed to ring continuously until shut off should the temperature reach 10° F. or higher.

When the lid of this model is raised, dual interior lights flood the inside of both compartments. Model A5 is equipped with a single light.

Model B10, a Deepfreeze official pointed out, was designed primarily for those rural customers and others who may not desire the deluxe features of Model C10. However, these features are available as accessories, as are metal baskets and dividers for Model A5.

Based on NEMA standards (an average of 35 pounds of assorted perishable foods to a cubic foot of home freezer space), capacity of the two 10-cu. ft. units is 350 pounds and that of the 4.8-cu. ft. model 168 pounds.

The working principle of the

freezers "is the same as we have always advocated," G. H. Smith, vice president and general manager, declared.

"The fast freezing and food storage compartments... are wrapped with many feet of copper tubing 'round and 'round separately from top to bottom at scientifically spaced intervals," he continued. "This tubing carries the cold-making refrigerant and makes every square inch of the inner walls of the food compartments freezing surface."

All models are powered by oversized condensing units. Units of Models C10 and B10 are announced as 1/4 hp., with forced draft cooling.

First consumer announcement of the new freezers, whose rectangular design was created by Walter Stopa, noted appearance designer, will appear May 17 in the *Saturday Evening Post*.

First announcement to the industry was made March 28 at a press conference at the Deepfreeze plant, which has been modernized at a reported cost of \$1,400,000. Press representatives saw and heard descriptions of the new line, toured the assembly line, and were served a frozen-food luncheon in the Division's experimental kitchen.

Following the luncheon, F. F. Dugan, general sales manager, discussed Deepfreeze's sales training and promotion program, which he said has been in preparation for two years.

A Deepfreeze official estimated that 10,000 to 14,000 units a month would be turned out when full production is achieved.

A Good Question

AIR CONDITIONING & REFRIGERATION NEWS, MARCH 31, 1947

Will Inventories Become a Major Problem To Refrigeration Parts and Equipment Wholesalers?

CHICAGO—Do refrigeration parts and equipment wholesalers have inventories that constitute a critical problem at this time?

For the past few years, all lived the life of the salesman and inventor.

titles than usual because, it is said, years supply on order, not to be obtained until the end of the year.

NO—WHEN THE LINE IS BLU-COLD

● BLU-COLD Units are built for HEAVY DUTY use BUT they are COMPACT and have SMALL MOUNTING DIMENSIONS. Thus ONE MODEL of each size fits all COMMERCIAL USES and most "PACKAGE" APPLICATIONS. Result—small inventory!

● BLU-COLD parts are now INTERCHANGEABLE from 1/4 H.P. to 1 H.P., and as the line is widened, will be interchangeable from 1-1/2 H.P. to 5 H.P. Aside from service advantages, this also cuts parts inventory to a fraction of ordinary requirements. Result—faster turnover!

We've Said It Before... And We Say It Again... BLU-COLD Dealers and Wholesalers can do a "Big Business With a Peanut Stand"

Lehigh Mfg. Co. Plant: LANCASTER, PA.

Inquiries Invited

... But **BLU-COLD** answered it last July!

"BIG BUSINESS WITH A PEANUT STAND" says the Lehigh Team

LEHIGH INTERCHANGEABLE PARTS PERMIT BIG TURNOVER WITH SMALL STOKES

COMPLETE LINE TO INCLUDE 1/4 - 5 H.P.

Lehigh BLU-COLD COMMERCIAL REFRIGERATION

All-Purpose HEAVY-DUTY Condensing Units 1/4 - 1/3 - 1/2 - 3/4 - 1 H.P.

USE Superior V-BELTS
AS ORIGINAL EQUIPMENT FOR ALL REPLACEMENTS

They have Eye Appeal—they look as good as they really are.

Here's why—

They're precision made for vibrationless drive—therefore they run truer, hold their shape, last longer.

They contain no reclaimed rubber. Their double jacket is synthetic rubber covered to resist oil and grease.

Their heavy duty cable cords are gum-dipped which makes for long life and flexibility.

They are made in a full range of sizes for every cooling or refrigerating fractional horsepower need. Write today for complete information about The Superior V-Belt line.

Superior in Quality as well as name

SUPERIOR RUBBER PRODUCTS MFG. CO.
OFFICES—4041 RIDGE AVE., PHILADELPHIA 29, PA.
PLANTS IN PHILADELPHIA, PA. AND EGG HARBOR, N.J.

NEW NO. 47 CATALOG
NOW OFF THE PRESS

WRITE FOR COPY ON YOUR LETTERHEAD TODAY

REFRIGERATION PARTS AND SUPPLIES
AIR CONDITIONING
HEATING

THE SUPPLY HOUSE THAT SERVICE BUILT

SERVICE PARTS COMPANY
2511 LAKE STREET, MELROSE PARK, ILL.

REFRIGERATION AND AIR CONDITIONING PARTS AND SUPPLIES
HERMETIC REPAIR SERVICE
ELECTRIC MOTORS & PARTS

SERVICE PARTS CO.

Rema's Policy On Several Matters Is Outlined In Report

(Editor's Note: Following are excerpts from the report of H. F. Spoehrer, retiring president of Refrigeration Equipment Manufacturers Association, which we were unable to include in the report of the annual meeting published in the April 21 issue. They discuss the formation of a committee or council of industry group's and Rema's policy on standards and participation in local shows.)

"During the year we have had constructive meetings with A.S.R.E., R.S.E.S., and other organizations. Rema also sponsored several all-industry meetings to try to relieve the 'Freon' shortage and to try to increase the amount of steel and iron available to the refrigeration industry. At the 'Freon' meetings we had representatives from R.S.E.S., N.A.R.C., Rewa, the national distributors of 'Freon' and the manufacturer. These meetings were so successful that a permanent committee, with representatives from Rewa, RSES, NARC, and Rema, was formed for the purposes of getting together to discuss industry problems whenever the need arises. This is a non-binding council which does not commit any of the associations to any decision of the group.

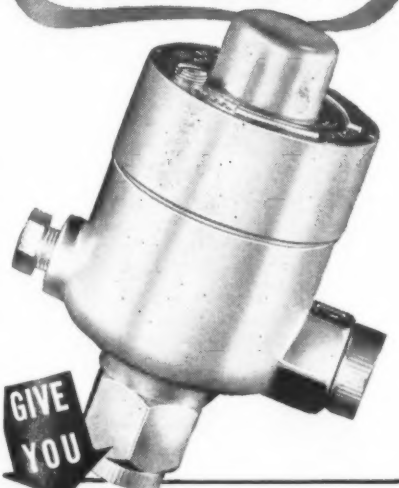
"There is one outstanding policy which your Board has adopted recently which you should know about. It was prompted by the fact that some of our Product Sections, which have established or are establishing commercial standards and who gather statistics applying to their products, have been in conflict to some extent with other trade associations. Also, a situation arose in which one or two members belonging to a Product Section elected not to go along with a particular program of that section.

"These matters were both referred to the Executive Committee . . . which felt that any matters pertaining to commercial standards or statistics were strictly matters for each Product Section to handle. Rema as a whole should in no way interfere in these matters or attempt to dictate in any way.

"The Executive Committee and the Board also re-affirmed the resolution adopted in 1937, recommending that Rema members refrain from participating in non-productive advertising or participating to the extent of exhibiting and financially supporting local or regional shows or exhibitions.

George Roche of Roche & Hull, Inc., Baltimore, newly elected president of Refrigeration Equipment Wholesalers Association, spoke to the Rema membership and emphasized that inventories would be the most important problem to the wholesaler in the immediate future and called on the manufacturers for their aid.

TEMPRITE 2-TEMPERATURE VALVES..



- Wide range of adjustment.
- Close temperature control.
- Rugged construction.
- Quick and easy adjustment.
- Large gas capacity. Low pressure drop.
- Extremely sensitive operation.
- 5 models. Capacities up to 250,000 btu.

TEMPRITE PRODUCTS CORP.

43 PIQUETTE AVE. • DETROIT 2, MICHIGAN

San Antonio Commercial Group Joins N.C.R.S.A.

SAN ANTONIO, Tex.—Members of the Commercial Refrigeration Association of San Antonio, organized here about six months ago, have joined the National Commercial Refrigerator Sales Association, announces George B. Herman, president of the national group.

Glenn Chapin of Texas Refrigeration & Equipment Co. heads the local group which now numbers 10 members. W. J. Harding of Alamo Equipment Co. will act as secretary-treasurer.

Directors include besides the officers, Eugene Bohne of Friedrich sales, A. J. Levinson of General Hotel Supply Co., and H. H. Pehl of City Carbonic Co.

Parts Wholesalers Plan Tours to Port Huron, Goshen

CHICAGO — Educational trips to the plants of the Mueller Brass Co. at Port Huron, Mich. and the Penn Electric Switch Co. at Goshen, Ind. are being planned for its members by the Central Refrigeration Wholesalers Association here, according to L. C. Keely, chairman.

Association members will visit the Mueller plant on Thursday and Friday, May 1 and 2. They will tour the plant and hold their regular bi-monthly meeting in quarters supplied by Mueller, he said.

For those who wish to remain over the week end, Mueller has arranged trips and sports activities such as golf and fishing, he added.

A subsequent meeting of the association will be held at the Penn Electric plant, Mr. Keely declared. After the meeting, the group will spend the week end at the Sphinx hotel at Lake Wawasee, approximately 15 miles south of Goshen, according to Mr. Keely.

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U.S. Electric's Peoria Store Becomes Polar Supply Corp.

PEORIA, Ill.—C. Carl Shinneman and R. M. Potter have purchased the Peoria branch store of the United States Electric Co., Springfield, Ill., and will operate it as the Polar Supply Corp.

Mr. Shinneman, president of the Polar Corp., was formerly manager of the branch store. Vice President Potter has been general manager of the United States Electric Co. and is continuing in this capacity in the new corporation.

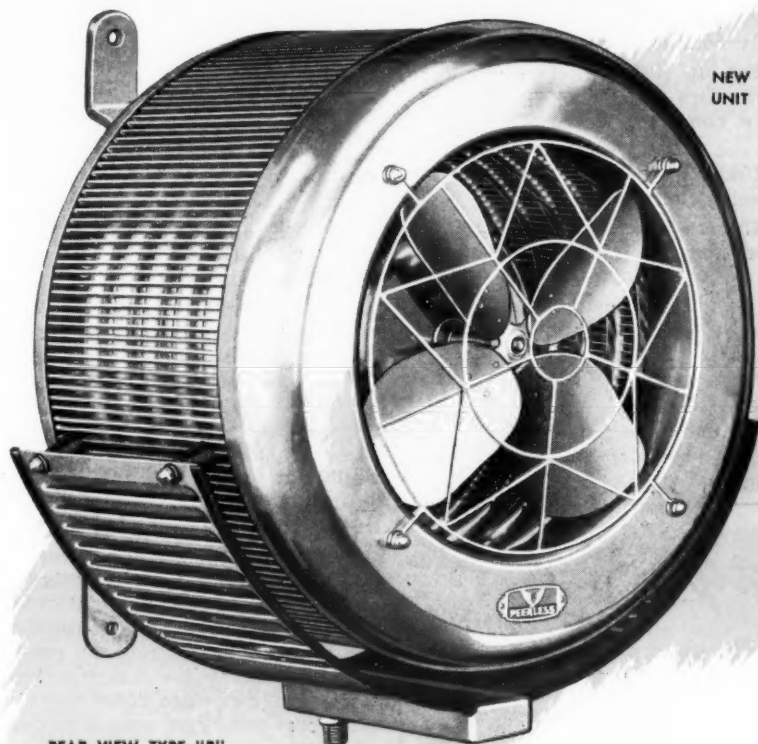
Refrigeration Supply Co. Opened In St. Paul

ST. PAUL—Opening of the Refrigeration Supply Co., Inc. at 259 W. Kellogg Blvd. here was announced recently by Frank R. Pond, vice president and treasurer.

The new firm, he said, is incorporated under the laws of Minnesota in the amount of \$100,000. President is Elmer K. Peterson and Lester A. Ost is secretary.

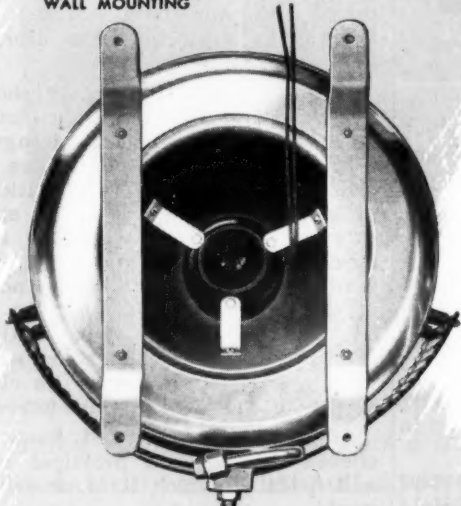
Mr. Pond is also president of the Refrigeration & Industrial Supply Co. of Minneapolis and of Refrigeration Wholesalers, Inc. of Duluth, Minn. He is operator of Refrigeration Supply Co. of Billings, Mont.

Operations cover the states of Minnesota, North and South Dakota, Montana, Wyoming, and Wisconsin.

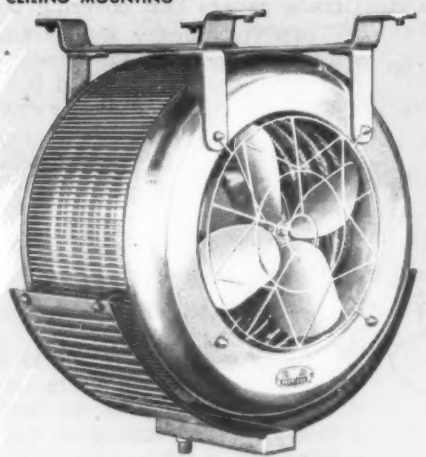


NEW TYPE "R" UNIT COOLER

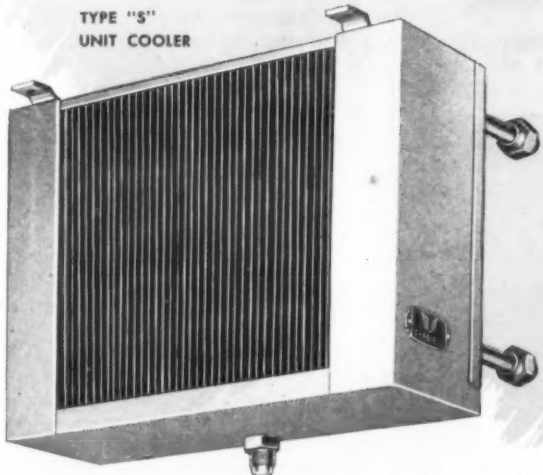
REAR VIEW TYPE "R" WALL MOUNTING



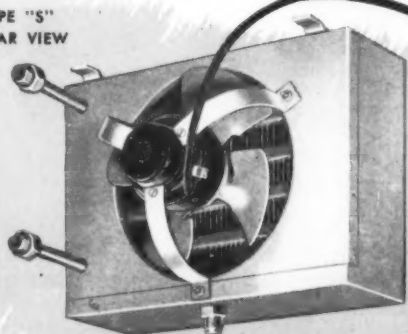
TYPE "R" UNIT COOLER CEILING MOUNTING



TYPE "S" UNIT COOLER



TYPE "S" REAR VIEW



The New... PEERLESS UNIT COOLERS

See these gleaming new PEERLESS beauties and marvel at their efficient performance. They are the Unit that every Refrigeration man needs for "that" forced convection job. Performance is the byword and performance means maintenance of required temperatures in "that" walk-in or reach-in cooler. Constructed of non-ferrous metals, all aluminum case, aluminum fins and copper tubing for highest rate of heat transfer. Ease of installation and mounting was one of the prime requisites in the design. They occupy minimum and cool maximum space, giving more refrigeration value per dollar. Sizes are graduated to provide the one needed for every job. Casings are highly polished aluminum. Hangers are aluminum. Coils are constructed of aluminum fins and copper tubing. They're beauties and beauties that perform!

The Type "R" Circular Unit Cooler draws in air from all sides and the center blower fan diffuses it evenly throughout the refrigerated space. The Aluminum air-flow drip pan is removable for quick access to the expansion valve. Fan Motor is installed in aluminum housing at rear of unit and not in the air stream. The Circular Type "R" Unit Cooler is a dual purpose unit in that it can be installed on the wall or in a vertical position on the ceiling.

The Type "S" Square Unit Cooler of all aluminum and copper tube construction, is a small, compact unit, a real dynamo of refrigeration. The ideal piece of equipment for beverage coolers, back bars, direct draw beer coolers, display cases and reach-in boxes.

Designed for superior aerodynamic performance, the new PEERLESS Unit Coolers are in the PEERLESS tradition of performance and quality. Specify them!



SOLD THROUGH LEADING REFRIGERATION SUPPLY WHOLESALERS

PEERLESS OF AMERICA, Inc.

General Sales Office

2901 LAWRENCE AVE.

CHICAGO 25, ILLINOIS, U.S.A.

INSIDE DOPE

by GEORGE F. TAUBENECK

(Concluded from Page 1, Column 1)

reduction benefits from our suppliers. We feel this thinking essential to stimulate volume production and distribution, and to eliminate the agitation of labor for abnormal wage levels. Low prices provide the greatest benefit to all."

Hats off!

George Mason Leads the Field

Having grown up not far from Indianapolis, the writer in his boyhood days had one consuming ambition: to drive in the Memorial Day 500-mile race held annually at the race track just outside that great city.

Although many years ago we did own and drive a very fast Auburn Speedster (known all around the refrigeration industry as "the Yellow Peril") that boyhood ambition was never realized. So the following piece of news makes us envious indeed:

A stock 1947 Nash sedan has been selected as the official pacemaker for the 31st annual Indianapolis 500-Mile Race, which will take place next May 30. At the wheel of the pace car will be George W. Mason, president of Nash-Kelvinator Corp. and president of the Automobile Manufacturers Association. Mr. Mason will lead a field of 33 qualifying racers for a

fast pace-setting lap around the two and one-half mile, oval track.

Wilbur Shaw, a three-time winner of the classic, will ride with Mr. Mason in the light blue, 4-door Nash sedan. Unlike the 33 custom-built qualifying racers, the Nash car which Mr. Mason drives will use regular gasoline, and in every other respect it will be a standard "assembly line" car. In contrast, all of the racing cars which will follow his lead are specially built. Some of them are worth as much as \$40,000.

After completing the race-starting lap, Mr. Mason will pull the Nash pace car off the track onto the concrete apron in front of the press pagoda so as to allow the entire field of professional racing cars to cross the starting line at full throttle.

Although only the 33 fastest cars will be permitted to compete after qualifying, almost 100 entries are expected. Drivers believe that an average speed of at least 120 miles an hour will be necessary to win this race. The present record of 117.2 MPH was set in 1938 by Floyd Roberts driving a Burd Special Offenhausen.

Care and Feeding of Distributors

Ray C. Neal, president, R. C. Neal Co., Inc., declares that appliance distributors generally regard the following items as being manufacturers' responsibilities. Read them and take note. They're interesting and pregnant, to say the least. So, let's go on with this story:

(1) Manufacturers should clearly state and adhere to a definite sales

policy which covers all of their relations with distributors.

(2) Manufacturers should not engage in direct competition with their distributors. By doing so, they rob the distributor of the best accounts in his territory.

(3) Manufacturers should incorporate selective distribution in their merchandising programs instead of placing their lines with so many outlets that none of them can develop profitable volume.

(4) A well planned advertising campaign to inform users of the manufacturer's product is a desirable adjunct. It is highly desirable for the manufacturer to encourage industrial users to rely upon the distributor's services.

(5) Manufacturers should develop a program for training the distributor's salesmen so that they will be as well informed as the manufacturers' own representatives.

(6) Provide adequate margins that equitably compensate the distributor.

(7) Set up differentials favorable to distributors who carry stocks and render a complete distribution service.

(8) Under their rights to suggest resale schedules.

(9) Use the facilities of distributors for carrying stocks instead of setting up independent warehouses.

(10) Provide distributors with catalogs, sales, engineering, and technical assistance, including attractive envelope enclosures featuring the distributor's name.

(11) Package their products in quantities which make for efficient handling.

These are responsibilities of the distributor:

(1) The distributor, when he accepts the franchise for the sale of any commodity, accepts with it the responsibility of adhering closely to the sales policy adopted and advertised by his supplier.

(2) It is a distributor obligation to maintain the type and kind of a sales force which can adequately represent the products of a manufacturer so he will feel confident in leaving the largest and best accounts in the distributor's territory to the distributor for attention.

(3) Distributors should handle only one or a very limited number of competitive lines. This refers particularly to branded goods such as drills, files, etc. It is particularly true if they have close cooperation and backing of the manufacturer. If a manufacturer has a selective distribution merchandising program, industrial supply distributors should be interested particularly in the number of competitive outlets in the industrial supply field. They, however, should analyze with the manufacturer, potential volume in other fields which they cannot adequately cover and, if found to be attractive, should assist the manufacturer to obtain additional outlets in these fields, such as (a) a wholesale hardware house for the retail trade; (b) a dairy supply house for dairies, etc.

(4) If a well planned advertising campaign and program for training distributors' salesmen is developed by the manufacturer, it should be used by the distributor, and the manufacturers developing these programs should be complimented and intelligent use made of their programs.

(5) After adequate margins are provided by the manufacturers, distributors should hold them inviolate at all times for any potential order no matter how large. We cannot expect the manufacturers to maintain proper margins for the distributors if the latter deviate from the manufacturers' published resale prices.

An advertising agency can best serve both manufacturer and distributor by acquiring this information:

(1) An advertising agency should be fully acquainted with its client's policies, his contracts and agreements with distributors such as exclusive or selective distribution—price policies—protection for stock carrying distributors against non-stock carrying distributors—a resale published price—direct selling policy of the factory which may not sell only through distributors. Without this knowledge the best agency would have a hard time putting its client across to the distributing industry.

(2) An agency should know its client's product, its principal uses, and fields in which it is or can be used.

(3) The agency should know the trade papers best covering the field.

(4) The agency should know the average size of the customers to whom its client sells and the size of the largest segment of the customers.

(5) The agency should know the average type of store selling its client's products—wholesale, retail, etc.

Bendix Abroad

The Chinese are going to have a new deal in laundering!

To China this year will be shipped some hundreds of Bendix automatic washers. They will be distributed through the Golden Star Co., whose American headquarters are in San Francisco.

Already widely known in China through its wartime shortwave broadcasts, the Golden Star Co. will focus its initial operations in Shanghai, later, establishing branches in Hong Kong, and other population centers, according to Harlow K. Lyons, export manager for Bendix Home Appliances, Inc.

A Bendix dealer for a number of years, the Golden Star Co. introduced the automatic washer to San Francisco's Chinatown.

"We have sold hundreds of automatic washers to Chinese in this country," writes Tom Tong, manager of this firm. "It will be even easier to sell them in China, because the wealthy Chinese are indeed progressive. Already we have shipped many units. One of them went to Chiang Kai-shek several months ago."

Mr. Lyons announces also the signing of a distributor for Cuba—Miralda, S.A., of Havana—of which J. M. Fernandez is general manager.

What's more, an initial shipment of 40 Bendix automatic washing machines to Russia, via the Amtorg Trading Co., has been effected.

The Soviet is considering the installation of Bendix washers in apartment houses, on a ratio of one to every three or four families, Mr. Lyons has been informed. In densely populated areas, public laundries are planned with batteries of a hundred or more Bendix washers, dryers, and ironers.

Malcolm Bard Points a Moral

Chrysler Corp.
Airtemp Division
Dayton 1, Ohio

Editor:

The attached came to my desk the other day.

At the right time in the economic cycle, which may not be too far off, the moral may be especially pertinent.

M. T. BARD,
Director of Commercial
Refrigeration Sales

"At the beginning of things, when the world was young, the donkey was esteemed by all tribes of men as wisest of animals. The good Sheikh El-Kandee owned a great herd of these sagacious beasts, which was the pride and joy of his life.

"Other sheiks from miles around came to listen and marvel at the wisdom of the herd. At such a time came even the Prophet himself, most learned and wise of all the sons of the East. With much glowing pride, El-Kandee led him out to the herd and said:

"Behold, O Prophet, the wise and talented asses. Converse with them, test them, and see if they are not verily wiser than forty trees full of owls."

"Then the Prophet addressed the asses. 'Let us test your wisdom,' said he. 'Answer me this question: What would an ass require for a three days' journey?'

"And they counseled among themselves and then made reply: 'For a three days' journey, O Prophet, any ass should require six bundles of hay and three bags of dates.'

"Very good," quoth the Prophet: "That soundeth like a fair and proper price." Whereupon El-Kandee broke into loud chuckles and said: 'Did I not tell you they are passing wise?'

"The Prophet answered, 'Wait,' and he again addressed the asses, 'I will not give six bundles of hay and three bags of dates for making it. Let him who will go for less stand forth.'

"And behold, they all stood forth and all began to talk at once. One would go for six bundles of hay and two bags of dates. Then another would go for three bundles of hay and one bag of dates, until finally one especially long-eared ass agreed to go for one bundle of hay.

"Then spoke the Prophet, 'Fool,' quoth he, 'you cannot even live for three days on one bundle of hay, much less profit from the journey.'

"True," said the long-eared one, 'but I wanted to get the contract.'

"And from that far-off day to this, asses have been known as fools, and price-cutters known as asses."

Safe protection all the way . . .

WITH

KOLD-HOLD

In every stage of food processing Kold-Hold offers superior refrigeration at lower cost. In the exclusive Kold-Hold Serpentine design, the refrigerant passages are an integral part of the plate itself which means that 100% of the exposed surface is prime cooling surface. Kold-Hold Plates produce required temperatures with less equipment . . . freeze quickly and defrost easily. One surface of the plates is flat, giving maximum contact and high heat absorption.

Kold-Hold Hold-Over Truck Plates hold truck bodies at desired temperatures thru a full day of operation. Then, at the end of a run, the plates can be plugged into the plant refrigeration system for recharging. Undelivered perishables remain safely in the cold truck overnight and are ready to go in the morning.

No matter where you stand in the food processing and distribution line, you will find that Kold-Hold offers you advantages that no other plate can give. Your nearby Kold-Hold Jobber is ready to serve you.

On the farm Kold-Hold cabinet liners serve in milk coolers and farm freezer cabinets.

In the processing plant Kold-Hold Plate Stands assure faster, more thorough freezing.

In the storage plant Kold-Hold Plate Banks hold required temperatures with less equipment.

At home Kold-Hold Cabinet Liners in many popular makes of home freezers and storage cabinets.

In the retail store Kold-Hold Cabinet Liners keep frozen foods at proper temperatures.

Plate Banks for space cooling of large areas.

Plate Stands for sharp freezing and hardening.

Serpentine Plates for Fountain Conversions.

Liners for freezers, cabinets and coolers.

Hold-Over Truck Plates for perishables in transit.

KOLD-HOLD

Jobbers in Principal Cities

protects every step of the way

KOLD-HOLD MANUFACTURING COMPANY - 500 E. HAZEL ST., LANSING 4, MICHIGAN

WANTED! REFRIGERATION ENGINEERS

Here is an opportunity for several experienced capable household refrigeration design and production engineers to become associated with one of the leading home freezer manufacturers. Permanent, responsible positions and salary commensurate with ability.

Also, a similar opportunity for several engineers experienced in refrigeration cabinet design and production.

Write for further information today—all correspondence held in strict confidence.

REFRIGERATION DIVISION

AMANA SOCIETY

AMANA, IOWA

First Year-Round Air Conditioned City Buses Equipped with 5-Ton Units, 16 Hp. Motors



Frank D. Winslow and Joe W. Thiele of Thiele-Winslow Co., Carrier distributor in San Antonio, stand beside first completely air conditioned city bus in the world. Inside temperatures will be 10° cooler than outside on hot summer days, it is claimed.

SAN ANTONIO, Tex.—The first year-round air conditioned city bus in the world was put into service on the streets of San Antonio on April 1, the San Antonio Transit Co. has announced.

Forty-nine other 32 seat ACF-Brill buses are scheduled to begin operations here during April, the company added. One hundred more, of the 40 passenger type, are currently in production.

Air conditioning on all the buses is accomplished by 5-ton Carrier units which circulate cool air through hundreds of small openings in the ceilings of the buses and through outlets over the seats, according to officials of the Thiele-Winslow Co., Carrier distributor here.

Dust and Odors Removed

Two filters under the rear seat remove dust and odors from the air before cooling and circulation, they added.

The air conditioning plants are powered by 16-hp. gasoline motors, separate and apart from the 165-hp. engines which power the buses.

Each plant includes a set of fans for even and forced distribution of the cool air in summer. In winter, the same fans circulate warm air from hot water heaters located under the floor through ducts along the floor to registers placed beneath the seats.

The bus bodies are heavily insulated around floor, sides, and roof with cork and rock wool. Windows are of Solex, a heat absorbing glass. They are encased in sliding aluminum frames which can be locked.

Experiment Four Years

Experiments on air conditioning city buses, made difficult by the continual opening and closing of the doors, was begun nearly four years ago by the Carrier Corp., the San Antonio Transit Co., and the makers of the bus, a Thiele-Winslow official said.

By a process of trial and error, a 5-ton unit was decided upon, he declared. Such a plant will bring the temperature inside the bus a good 10° F. or more lower than that outside on the hottest days, he asserted.

In addition to the air conditioning, the new buses are equipped with seats 4 in. wider than on conventional

buses. The seats are upholstered with turquoise mohair over foam rubber. A wider aisle is provided by installing single seats between the front and side doors.

To acquaint city residents with air conditioned riding, the first bus was placed on a loop route through San Antonio's downtown section and free rides were given for four days, the transit company reported.

Refrigerated Self-Service Case Triples Beer Sales

ELMONTE, Calif.—Sales of bottled beer have been evenly tripled at Crawford's Village Store, here, since the market transformed an open self-service refrigerated case.

The Hussman self-service case will accommodate 24 cases of beer, approximately half in family quart sizes, refrigerated to 40° F. at all times. The case is set up just inside the left front entrance, and is marked by signs which read "Cold Refrigerated Beer—Serve Yourself."

Emergency Parking Permits Issued to N.Y. Servicemen

NEW YORK CITY—The police department here is issuing refrigeration repairmen emergency cards, permitting them to park in restricted areas when on emergency service calls.

Cards are issued after applications are approved by the police department.

City Can't Duplicate State Bond and Examination Fees, District Court Judge Rules

OKLAHOMA CITY—The District Court here has ruled that Oklahoma City cannot collect license fees or require bonds or examinations from electricians working on local construction.

In his ruling Judge Lewis R. Morris declared that under state law, electricians must satisfy all three of these requirements, and that the city cannot duplicate these acts.

He pointed out, however, that the city may still require that the electricians' work be inspected, and that the city may lawfully charge a fee to do so.

A similar decision, passed down by the California Supreme Court allows any refrigeration contractor, or any other kind of contractor, having a state license, to operate within any municipality in the state. This ruling also upheld the city's right to require permits and inspections for electrical work.

Universal Cooler Corp. Announces Four Changes In Engineering Section

MARION, Ohio—Four new appointments have been announced by W. W. Highman, director of Engineering at the Universal Cooler Division of International Detrola Corp.

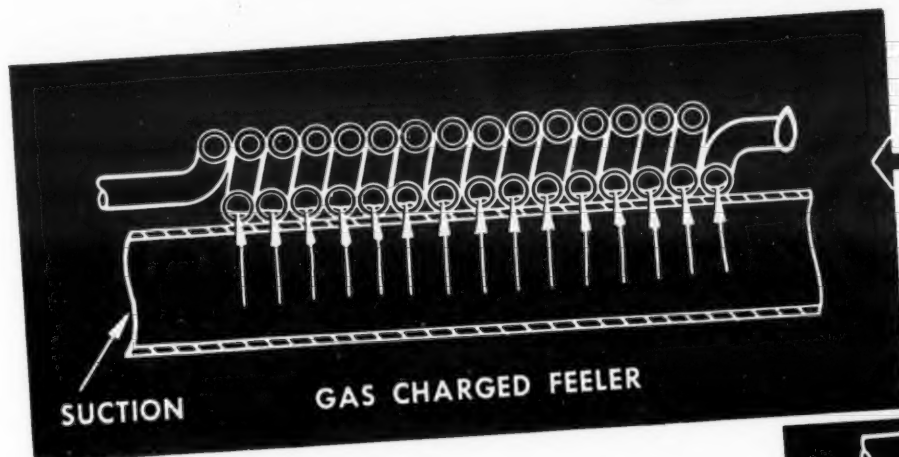
Perry Hall has been named to the newly created post of director of quality. He has been with Universal Cooler since 1937.

New chief draftsman is Joe Kelleher, who has been assistant chief draftsman. He has served with the company in the drafting department since 1940.

Lloyd Staebler, formerly head of the quality committee, has been promoted to director of research and development.

Heading the recently organized process committee is John Derau, a comparative newcomer to Universal Cooler with 17 years experience in the refrigeration field.

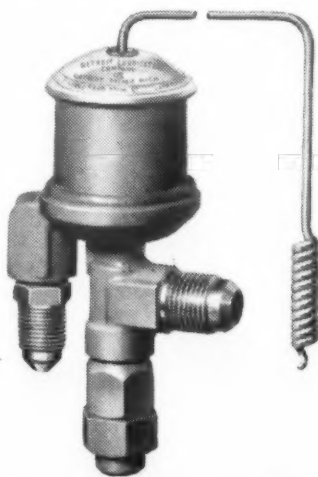
Why "DETROIT" GAS CHARGING PROVIDES *Better Regulation* OF A REFRIGERATION SYSTEM...



THE ILLUSTRATIONS above show graphically why "Detroit" Gas Charging provides better regulation of refrigeration systems. A "Detroit" Gas-Charged Valve responds more quickly—keeps the coil fully refrigerated at all times, and puts a definite limit on motor load during extended pull-down periods.

Illustration "A" is a cross section of a "Detroit" Gas Charged feeler bulb. When the charge of gas condenses as the bulb cools, it is deposited in small quantities which are in close contact with the suction line. The total amount of liquified gas is much smaller than in a liquid charged bulb as shown in "B".

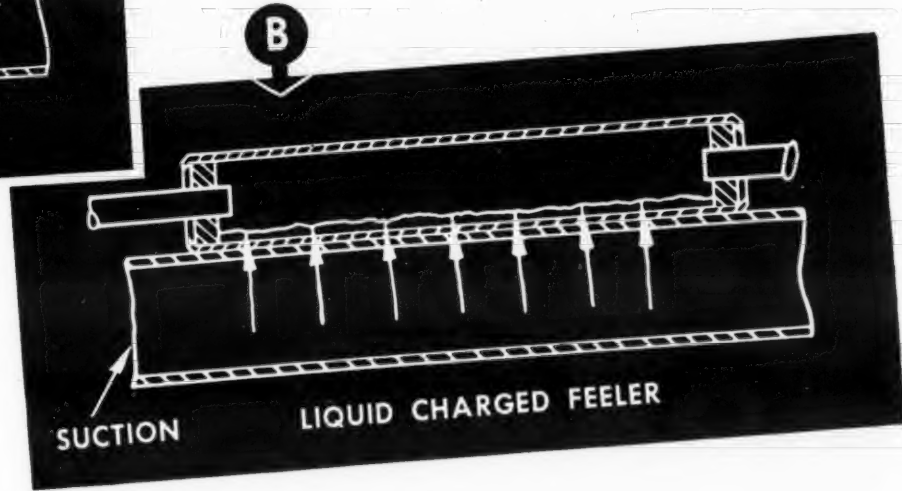
As gas charged bulb "A" warms up, there is an instantaneous increase in pressure due to rapid vaporization of the minute quantity of liquid in the coils of the bulb. This produces the quick response characteristic of "Detroit" Gas Charged Valves.



"Detroit" introduced Gas Charging fourteen years ago. Today Gas Charging is the accepted standard of the industry. All "Detroit" Thermostatic Valves are available Gas Charged.

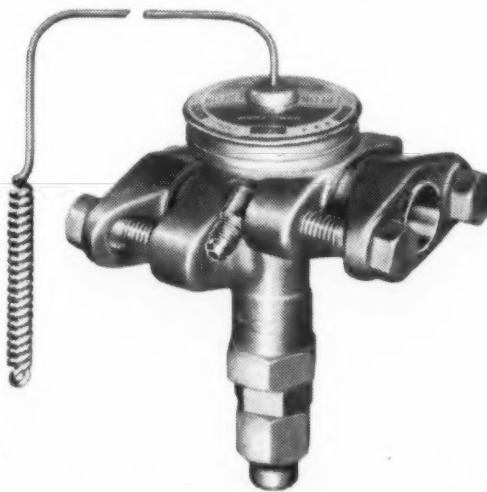
No. 673 Thermostatic Expansion Valve for many years the standard of the refrigeration industry. Orifice sizes $\frac{3}{16}$ " to $\frac{1}{2}$ " with capacities up to $3\frac{1}{2}$ tons Freon 12 or Sulphur Dioxide and 6 tons Methyl.

No. 787 "Dura-ram" Expansion Valve representative of the "Detroit" large capacity line. No. 788 is rated 12 to 20 tons—No. 787—6 to 11 tons—No. 786—3 to 6 tons. Has external equalizer connection and can be furnished with No. 790 distributor with either 6, 12, or 18 openings ($\frac{1}{4}$ " each) for multiple distribution.



When liquid charged bulb "B" warms up, the increase in pressure is delayed because of the thermal lag encountered in raising the temperature of the large mass of liquid to produce the necessary vaporization.

Fast response is inherent in Gas Charged power elements. Moreover, by charging the element with a carefully limited amount of gas, motor overload during the pull-down of a warm system is minimized. The valve remains closed until suction pressure is reduced to a predetermined value. Generally, a smaller motor may be used.



Detroit Contractors Assn. Ups Membership 30%

DETROIT—With the admission of four new members and the reinstatement of one former member during April, the Refrigeration Contractors Association of Detroit has increased its membership rolls by nearly 30% in the past five months, Frederick R. Bolton, association secretary, has announced.

During that period 14 new memberships were approved, he declared. Applications approved at the association's April meeting were those of Ackerman Refrigeration Co., Buhl Sons Co., Forsythe & MacAnally, Kenzie's Refrigeration Service, and Wood Refrigeration Service, all of Detroit.

Dooley Elected To Head Phoenix Distributorship

PHOENIX, Ariz.—Pat Dooley has been recently elected president of the Radio Specialties & Appliance Corp., distributor here, according to a company announcement.

Mr. Dooley, who has been active in West Coast radio parts jobbing since 1935, has announced his intention of having the corporation enter more aggressively into the home appliance field.

DETROIT LUBRICATOR COMPANY

General Offices: 5900 TRUMBULL AVENUE, DETROIT 8, MICHIGAN
Division of AMERICAN RADIATOR & Standard Sanitary CORPORATION
Canadian Representatives: RAILWAY AND ENGINEERING SPECIALTIES LIMITED, MONTREAL, TORONTO, WINNIPEG

"Detroit" Heating and Refrigeration Controls • Engine Safety Controls • Safety Float Valves and Oil Burner Accessories • "Detroit" Expansion Valves and Refrigeration Accessories • Stationary and Locomotive Lubricators

SKYROCKET SUMMER SALES WITH

SNO-BREZE

EVAPORATIVE COOLERS



PERFECTED IN THE TESTING GROUND FOR COOLERS — THE ARIZONA DESERT!

Can be installed on roof or on outer wall. A complete range of sizes — 2,500 to 20,000 CFM. Immediate deliveries. Write for free catalog.

Palmer
Manufacturing Corp
Phoenix, Arizona

Field Report

Before the war one of the most popular editorial features to appear in the News was the "Field Report," which is now being resumed.

In the "Field Report" the editors and staff correspondents of the News bring to the readers, not their own opinions and interpretations, but report what distributors, dealers, and service contractors are currently finding out about the market, prices, service charges, and all the other problems that arise in distributing the industry's products.

Freezers Poorly Made by Back-Alley Shops Hurt Indianapolis Market, Says Service Dealer

By C. Dale Mericle

INDIANAPOLIS — Unsatisfactory performance of home freezers which were made in back-alley shops during the war has slowed down the whole market for freezers here, complains W. L. Drake.

Besides operating Drake's Refrigeration Service, which he believes is the largest independent service shop in the state of Indiana, Mr. Drake also sells home freezers. Recently he acquired a franchise for the Westinghouse domestic and commercial lines.

"Too many of these back-alley freezers," he says, "were poorly made. The cabinets weren't too well constructed, but the chief problem has been insulation. A lot of these small-time freezer outfits employed a loosely packed type of insulation. Now while that may be right for a walk-in cooler or perhaps for any

cabinet operating at normal refrigeration temperatures, it hasn't worked out too well in these freezers.

"Possibly one trouble may have been that the cabinets weren't sealed very well. Another cause was probably the hand-packing of the insulation. Anyway," he points out, "we've had to do too many repair jobs on these, and we usually find the insulation packed down and full of moisture. All this has made prospects here rather sour on the subject of home freezers."

Mr. Drake, who is on the national board of directors of the Refrigeration Service Engineers Society, employs 11 installation and servicemen in his shop, three or four of the men working regularly in the shop while the others are on outside calls.

He's located just a few blocks from downtown Indianapolis and

operates out of his home. (This sounds like another of those many thousand servicemen who use their homes as headquarters and shop combined, but Mr. Drake's business is different and much bigger, perhaps.)

All of the first floor of the house is devoted to refrigeration sales and servicing. At the front Mr. Drake has a small office as does the girl who handles the dispatching and serves as secretary and bookkeeper. Directly behind these two front offices is a moderate size display room.

At present he's using it for commercial equipment and home freezers, but when household appliances start coming through better, Mr. Drake plans to devote most of this space to appliance displays.

The Drake family lives in an apartment on the second floor.

"A small business man such as myself has to live with his business if he's going to make a success of it," declared Mr. Drake, who follows his own advice to the letter of the word.

PLATFORM FOR 'SERVICE LINE'

Rear of the first floor is devoted to the service shop, which occupies a space about 40 by 16 ft. This has been compactly arranged by Mr. Drake to permit complete servicing of both household and commercial refrigeration equipment.

One feature of this shop is a platform, about 3 ft. wide and raised 1 ft. off the floor, which runs down the center of the shop. Refrigerators, condensing units, and other large pieces of equipment are placed on the platform for servicing. It will hold seven standard size household boxes.

"This platform is a great help in making repairs," says Mr. Drake. "It brings the boxes up off the floor and makes it much easier for the men to work on the condensing unit and other parts of the box."

The boxes are usually placed so that they face the rear of the shop where a workbench runs nearly the full 40-ft. width. It's a simple matter for the service mechanics to turn from bench to box as they work.

Along the front of the platform are frequently spaced electrical outlets to plug in the refrigerators. Also along the front of the platform are connections for purge lines. A 1/2-hp. unit under the workbench is hooked up to these purge lines to simplify this operation and make it quite safe.

Drake's does almost a complete job

of servicing with just two exceptions—the firm doesn't rewind motors (although it repairs them), and cabinet refinishing is done outside by an automotive firm which has a big spray booth. Drake's frequently paints condensing units, however.

Equipment in the shop includes a drill press, grinding wheel, arbor press, and a lathe. The latter, which has a 10-in. swing and a 4-ft. bed, proves very useful, according to Mr. Drake. It's used frequently for dressing commutators, besides being available to turn up any small parts that might be needed.

PLENTY OF OLDER MODELS

"I couldn't estimate how many boxes we repair," he said, "but there must be quite a lot. If new refrigerators were available in normal quantities, we probably wouldn't have quite so many of these old jobs on our hands."

The well-planned arrangement of the shop could probably be expected from Mr. Drake, for he is a veteran in the field despite his youthful appearance.

"I started in this business as a kid," he declares, "and I can remember helping install the first low pressure apartment house system in Cincinnati back in 1923."

His experience also includes three years with Frigidaire when he was in charge of building water coolers.

One of the most striking things about the repair shop is its well lighted appearance. There are two double rows of fluorescent lights running the full width of the shop. One row illuminates the workbench and the front of the cabinets, while the other row of lamps takes care of the rear of the cabinets.

REASON FOR CHARGES

The firm does no contract servicing.

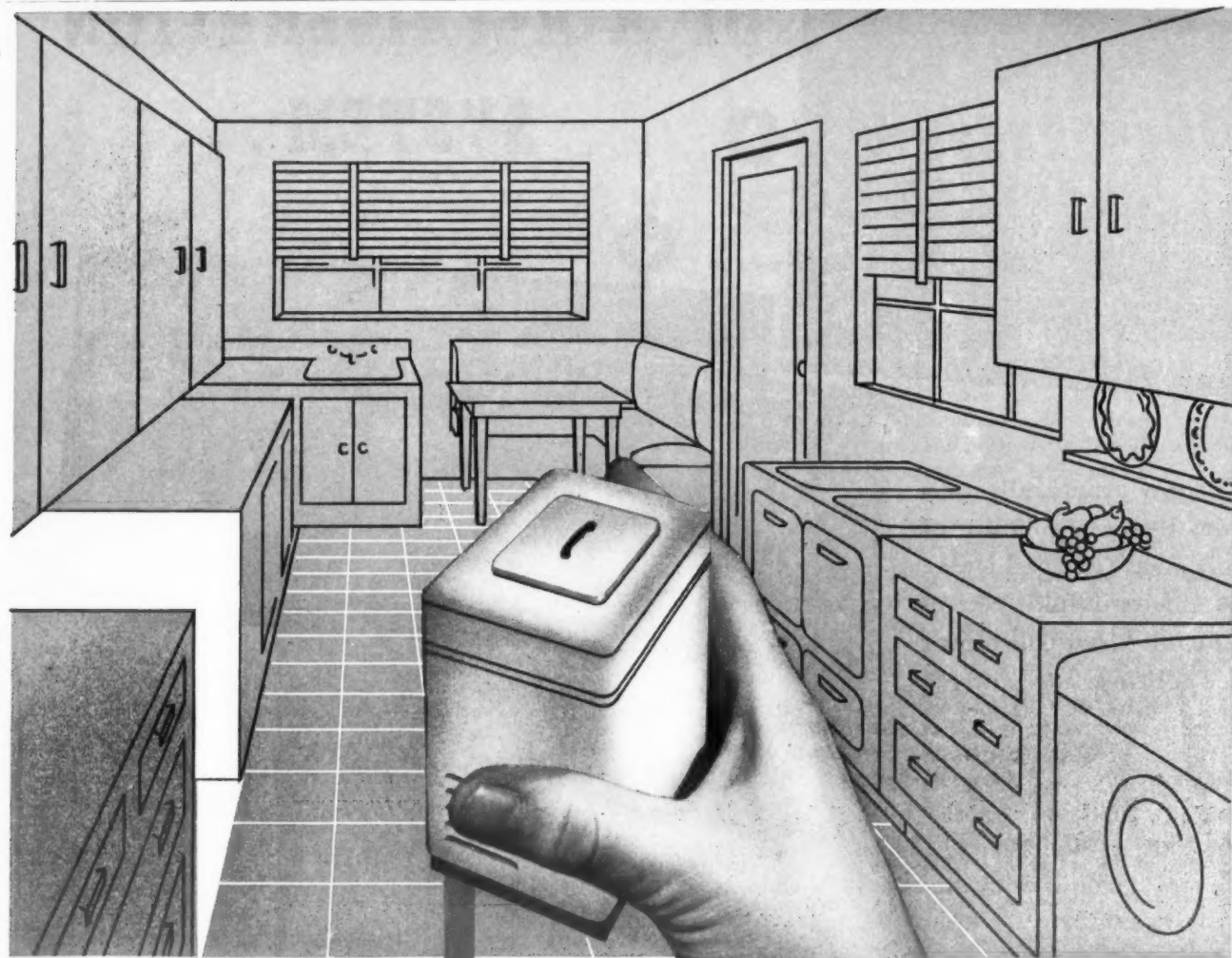
"We've thought about that type of operation for a long time, but we've never gotten around to set up such a plan," he commented.

One reason for this, hinted Mr. Drake, is the vast number of servicemen operating in Indianapolis. With a population of about 400,000, the city has possibly 1,500 servicemen, according to some estimates, said Mr. Drake.

This number might not be so large if the city had a licensing law, he believes.

Charges are held at \$2.50 per call at the Drake firm. He admits this

(Concluded on next page)



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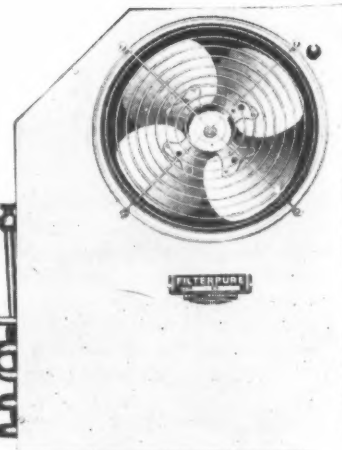
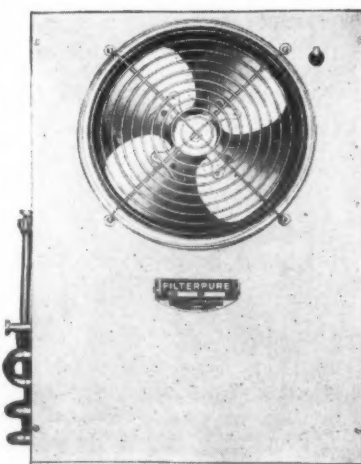
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2 MODELS

- for installation in extreme end of the fixture
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3 SIZES

- to balance 1/4 - 1/3 - 1/2 HP compressor.

Sold by Leading Refrigeration Wholesalers

BETZ CORPORATION
HAMMOND, INDIANA

'Platform' Mounting for Servicing Operations

W. L. Drake looks over the condensing unit in a box sent to his shop for repair. Household models and commercial condensing units are placed on a 1-ft. high platform in the shop to facilitate repair work.



'Overcrowded' Field Holds Service Charges Down

(Concluded from preceding page)

is low, but there's a good reason for it, he declares.

"Many of the one-man operators are charging only \$2 an hour. If my price were \$3, price-minded customers who called up to ask how much we charged would probably balk at paying \$3 when some one else would do the job for only \$2. The \$1 difference might be too much for some of them, but the 50-cent difference is small enough to be ignored.

"Our objective," he explained, "is not so much the \$2.50 an hour income, but the possibilities for equipment sales that often result from service calls. The little we might gain by charging a higher price on service could be lost several times over if we missed out on the sale of replacement or additional equipment."

Just now, he adds, the firm is doing considerable business in replacing old, gravity type coils with blower units. This can be a profitable operation, according to Mr. Drake.

To look at the beautiful landscaping around his home and place of business, one would think that landscaping might be Mr. Drake's hobby. It isn't, however, laments Mr. Drake, who finds himself too busy for that. He does have a hobby, though, which also pays off in his business.

It's flying, and Mr. Drake has his own two-place Aeronica. He doesn't use the plane to make service calls, for the firm's territory is pretty much confined to Indianapolis and Marion county. But it comes in awfully handy in getting materials, he says.

"If we need a certain part in a hurry, I can hop in the plane and get it quickly. Trips from here to Cleveland, Cincinnati, Dayton, St. Louis, or Chicago are no trouble at all. It's quicker, and cheaper than air freight service, too."

Just now he's anxiously awaiting delivery of a new Cessna all-metal two-place plane.

4-Store Outlet Finds Higher-Priced Models Still Selling If Sales Effort Is Put Forth

INDIANAPOLIS—The main problem in the appliance field is still delivery, at least as far as W. R. Booth is concerned. He's the appliance manager at one of Pearson's four stores in Indianapolis.

"Appliances are still coming through too slowly for us," he declared, which is an excellent indication that there's still a big market, he believes.

The question of prices and their relation to appliance sales doesn't seem to enter the picture here, according to Mr. Booth, who says that refrigerator sales in his department are usually between \$220 and \$300.

In terms of cubic feet, this means that the biggest sellers are in the 7 to 9 cu. ft. class.

"Of course," he admits, "it takes a certain amount of salesmanship to sell these more expensive models. We have to point out the extra features on the top models, but when that's done the prospects have no objection whatsoever to paying the higher price."

Great interest is being shown in Frigidaire's Cold-Wall models, says Mr. Booth. Besides the complete Frigidaire line, this Pearson's store also handles several makes of gas ranges, the Laundrell automatic washer, Easy's "Spindryer," and the conventional wringer-type ABC and Duchess washers.

"In general, I think that refrigerator prices have advanced less than any other appliance. A 7-cu. ft. standard model sells for around \$199 today, and that's just a few dollars

more than the price we used to sell them at back in the so-called normal years of 1937 and '38," he commented.

The refrigerator prospects who come into the Pearson's store, which sells furniture, musical instruments, and records in addition to appliances and radios, don't seem especially interested in the question of whether there's adequate storage space for frozen foods, according to Mr. Booth.

"I personally think the industry has over-estimated the market for home freezers, too," he adds. "There's no doubt at all that freezers are fine for farm homes, especially if the freezers are large enough."

"City families in the higher income brackets are also good, logical prospects for home freezers, but judging from the inquiries of the average city dweller here, this latter group isn't greatly interested in the subject," he opined.

Pearson's still employs a type of priority plan on sales of hard-to-get items, but the store some time ago stopped taking advance orders for items that were really hard to get.

"If there is a good chance of our getting a delivery in the very near future on some appliance, we advise prospects to make a deposit with us, even a small deposit. Those who have a deposit will have first call when the appliances come in," explains Mr. Booth.

This Pearson's store is now undergoing extensive remodeling, and the space allotted to the major appliance department is rather limited, but so are appliances, he points out.

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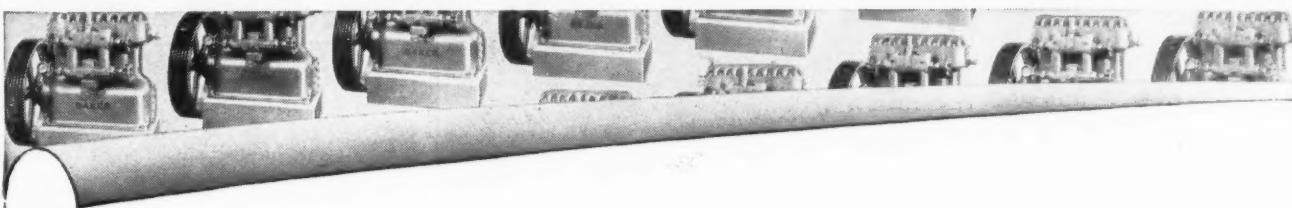
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Refrigeration compressors  are essential to

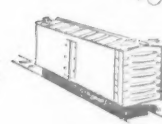
bring you fresh  green peas in the full blush of

maturity. After blanching  green peas  are

rushed to freezers. Here compressor maintained sub-

zero temperatures  freeze them hard as hail. The

peas are then put in protective packages  and

shipped in low temperature cars  and trailer-

trucks  to  compressor refriger-

ated warehouses. Exact sub-zero temperature  is


held during storage. Refrigerated trucks deliver them

to frozen food dealers  where they are sold

from compressor-equipped cabinets.  Your

home  freezer or frozen food compartment

stores them safely.  Green peas  and

other  vegetables are also completely processed

and frozen by frozen food locker plants.  It

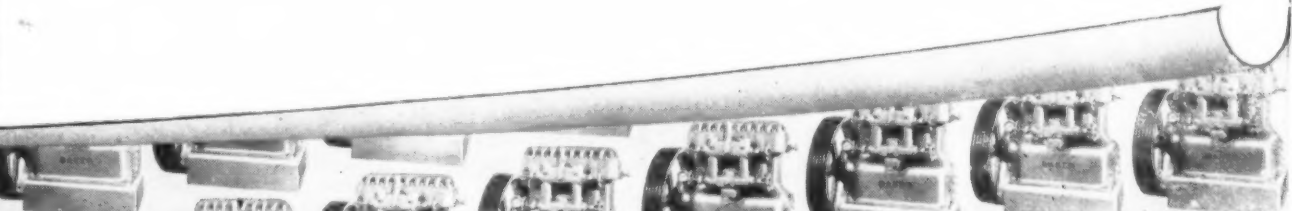
takes many compressors to deliver fresh frozen peas

to your dinner table. Baker  compressors help

bring luscious frozen vegetables to tables all over the

 world.  Ice Machine Co., Inc.,

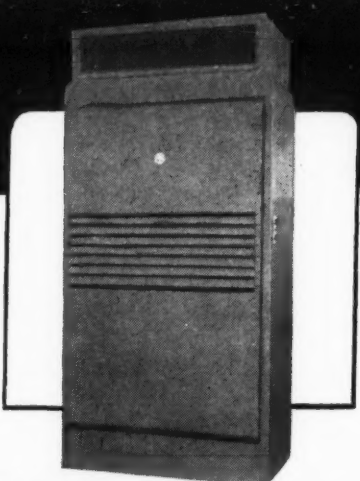
Omaha, Neb., and South Windham, Me. 



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The oversized 3, 5 and 7-ton TYPHOON units are the result of over 30 years experience in building air conditioning equipment capable of delivering full capacity under most trying conditions.



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Taylor BEER CONTROL SYSTEMS

SAVE TIME, MONEY AND TROUBLE
Install these units for your customers and cut your service calls to a minimum. Buy the beer faucet of perfect performance direct from the manufacturer and increase the profits of both yourself and your client. Write for particulars now!

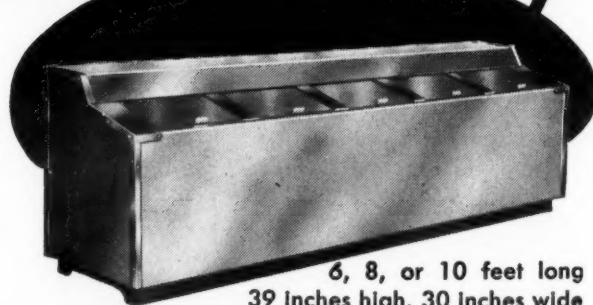


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Marvel of
Efficiency



6, 8, or 10 feet long
39 inches high, 30 inches wide

Dry Beverage Cooler

Beautiful stainless steel and polished aluminum outside with polished aluminum interior. Heavy duty fin-type coils, designed to give fast cooling and less frosting. Rugged construction, first quality materials throughout. Stainless steel lids slide away or lift out. 8-inch utility shelf. Removable dividers inside. Toe space under edges.

MARVEL Quick Freeze

Storage Locker

INSULATION:
5 inches thick

CAPACITY:
12 cubic feet

SIZE:
72 inches long
30 inches wide
34 inches high

COMPRESSOR:
1/4 Horsepower
heavy duty motor



RANGE:
From 15° below zero
to 3° above zero

De Luxe model shown is stainless steel throughout. Other models have stainless steel tops with baked on white enamel or polished aluminum sides. Smooth inside surface for easy brushing off of frost. Large lid—23 x 45. Toe space.

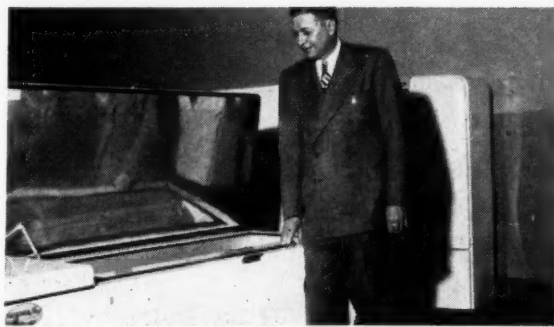
DEALERS
WANTED

WALLEN ROGERS Industries
BOX 272-AC DEMOPOLIS, ALA.

Field Report

Old Time Selling Methods, Salesmen on Salary Plus Commission, Move Refrigerators, Freezers

Cecil B. Marvel, veteran Terre Haute, Ind. appliance dealer, takes a look at a "best seller for 1946." The Marvel firm sold 460 of these 12-ft. Harder-Freez models last year.



TERRE HAUTE, Ind. — Getting appliances and commercial cabinets apparently isn't much of a problem to Cecil B. Marvel, who has operated an appliance dealership here for more than 17 years.

At least, if deliveries are a problem, Mr. Marvel must have found the solution, for the back half of his 29 by 155-ft. store on the main street here is piled to the ceiling with crated merchandise, and he has two more warehouses filled, also.

Even at that, he says, he doesn't have all the merchandise he could sell.

"If appliances and commercial equipment were plentiful, we'd have 8 to 10 salesmen out all the time instead of just the two that have been working for the past two years," states Mr. Marvel.

Old-time specialty selling methods are employed by Mr. Marvel and his two salesmen. The salesmen, incidentally, each averaged about \$5,500 income last year. They're paid \$20 a week salary, receive \$10 weekly as car allowance, and then 7% commission on their sales.

To line up prospects and create sales Mr. Marvel makes extensive use of newspaper and radio advertising. The latter consists of spot radio announcements, but the newspaper advertising is a little more extensive.

Every Sunday the rotogravure section of the local paper carries a large advertisement from Marvel's, and similar advertisements appear at least once during the week.

"For the Sunday ads I usually try to feature some product that we have in fairly good supply," explains Mr. Marvel.

Shipments are spotty, though he comments. Just recently he had to

stop deliveries on stokers because his inventory was piling up as the season ended, but meat cases are still a scarce item.

"About a month ago," he said, citing another example, "I was worried about our stock of open type frozen food display cases. Looked like we had too many of them. Then last week we sold four."

Marvel's, as the store is known, is a dealer for the complete Frigidaire line, including commercial equipment, but in addition, the firm sells Tyler and Sherer-Gillett commercial equipment, Harder freezers, RCA Victor and Stewart-Warner radios, and Delco Conditionairs, stokers, and oil burners.

Last year Marvel's stacked up quite a record in freezers, selling 460 of the 12-ft. Harder boxes. Most of these went to grocers and other types of food retailers, said Mr. Marvel.

The frozen food and freezer business is excellent in Terre Haute, according to Mr. Marvel, who has these sales records to back his statements. "Prospects who come in to look over our refrigerators are quite definitely interested in storage space for frozen foods," he adds.

The home freezer sales did slow up in March, but that's seasonal and is to be expected, he points out.

Installation and service work on both the household and commercial lines are handled by two men who operate an independent firm with their offices in the Marvel building.

"While their work is not confined to our calls, they do our work ahead of anything else, and we take care of handling their telephone calls," said Mr. Marvel. "We find this arrangement works out very well all around."

Customers Becoming More Critical In Selecting Merchandise, and So Is This St. Louis Dealer

ST. LOUIS — "Refrigerator prospects are becoming more and more critical in selecting models," declares A. J. Brandt of Brandt Electric Co. here.

"And people seem to be giving more thought to the size of box they buy," he continued. "A year ago a customer who wanted a 9-cu. ft. model would take a 7-ft. box if that was all there was available. But not today. The customers prefer to wait for the refrigerator they originally planned to buy."

Customer preference, incidentally, seems to run to the 7 to 9 ft. units these days, said Mr. Brandt.

The Brandt firm occupies a large store in downtown St. Louis and handles the complete lines of Admiral, Gibson, Hotpoint, and Philco appliances, several makes of washers, radios, and traffic appliances. A. C. Brandt heads the firm.

Just as the customers are becoming more choosy in selecting refrig-

erators, the Brandt firm is using more care in accepting deliveries, points out A. J. Brandt, son of the president, even though this policy admittedly cuts down deliveries.

"We refuse to accept delivery of refrigerators that aren't complete in every respect," he states. "That's because we are interested in having only completely satisfied customers."

"Perhaps it was all right a year ago, but not now. Selling a refrigerator or another appliance that is not completely equipped usually doesn't work out so well. It may take weeks or months for the missing parts or accessories to arrive."

"We want to eliminate everything that tends to impede our progress toward closing a sale successfully and keeping our customers satisfied," he emphasizes.

It would be possible, he added, to keep these incomplete appliances in stock until parts come through.

"We don't think it wise, though, to

build up a big inventory. We want to keep our inventory clean to avoid losses which would occur if prices should suddenly be cut."

Refrigerator prospects at the store don't seem to show much interest in storage space for frozen foods, although a few people appear interested, said Mr. Brandt.

"I think this also ties in with the lowered demand for home freezers we've noticed here. Since the end of OPA the demand for home freezers has dropped off considerably," he declared. "We also know that frozen food inventories in the warehouses have piled up."

"Perhaps the frozen food industry has used the wrong approach. Maybe," suggests Mr. Brandt, "the industry should have promoted the use of frozen foods first instead of concentrating mainly on the storage angle."

And as far as the home freezer itself is concerned, Mr. Brandt labels most of them as "just glorified ice cream cabinets." As far as he's concerned, a really good design of home freezer hasn't been brought out yet, he states.

"The ultimate freezer design will probably culminate in the upright cabinet type, perhaps a combination 9 ft. box having 6 ft. of standard temperature storage space and 3 ft. for frozen foods."

"I also think that prices will have to come down on home freezers if much sales volume is to be attained," he continued. "Home freezers must be developed into the 'convenience' or 'necessity' bracket instead of remaining in the 'luxury' class where they are now. Perhaps a 4-cu. ft. freezer listing at about \$139 could be the answer."

There are seven salesmen employed in the Brandt firm, which altogether numbers 41 employees, including seven "benchmen" in the service department. No outside salesmen are employed at present, but Mr. Brandt indicated that some would probably be added when merchandise becomes more plentiful and it becomes necessary to do more "prospecting" for appliance sales.

Mr. Brandt thinks the firm has comparatively few salesmen for the volume of business handled, but he emphasizes that these few are well trained.

"Seven well trained salesmen can do as much, or probably more, than a dozen untrained men," he states.

Advertising is used extensively by the firm and is confined to the daily newspapers. The St. Louis Post Dispatch is used almost exclusively. The firm runs display advertisements.

(Concluded on next page)

TREMENDOUS DEMAND!

THE SENSATIONAL, NEW



PROTECTS
FROZEN
FOODS

The exclusive, self-contained warning system... sounds an alarm whenever temperature rises above danger zone FROM ANY CAUSE. Not connected in any way with electrical system! Every freezer owner and locker plant needs one. Liberal dealer discounts, literature available.



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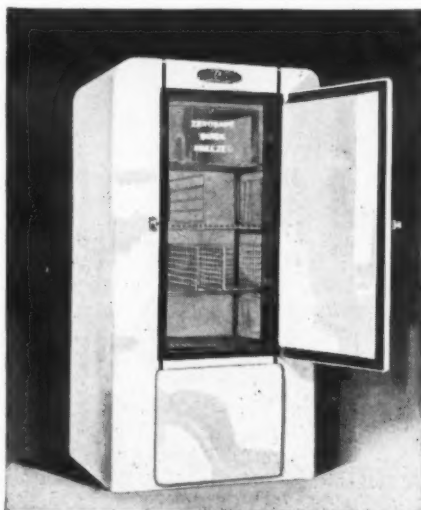
WILSON "ZEROSAFE" FREEZERS ARE TIME-TESTED

WILSON "ZEROSAFE" REACH-IN FARM FREEZERS ARE YEARS AHEAD

Since 1939 enthusiastic users of Wilson "ZEROSAFE" Freezers have acclaimed the Wilson-pioneered features of front-opening convenience, adequate sizes, real usability and long, efficient life.

Now brought to the peak of its development as a truly great farm and home freezer, the "ZEROSAFE" combines all the great TIME-TESTED Wilson features in ten new models ranging from 15 cu. ft. to 120 cu. ft. in capacity, finished in the gleaming beauty of white baked-on enamel, ready to win new thousands of life-long "ZEROSAFE" friends.

If your merchandising plans include the selling-and-servicing of a complete line of modern freezers that are outstanding in quality and leadership, let's exchange information today. Address Desk 11.



Wilson "ZEROSAFE"
Model FF-15 Farm Freezer

WILSON REFRIGERATION, INC. SMYRNA DELAWARE

Field Report

Market More Selective

(Concluded from preceding page)
for both the service department and new merchandise. The merchandise advertisements are of good size and they appear frequently.

Service department ads appear almost every day, featuring washer service, or repairs on irons, radios, clocks, or other appliances. The washer service advertisements are the largest, usually totaling 80 lines, while the others run around 20 to 30 lines, said Mr. Brandt.

Advertising in community newspapers and the like is not employed, and at the present time Brandt's is not using direct mail advertising. The latter may be resumed when merchandise becomes more plentiful, he commented.

Servicing of appliances, except for refrigerators, is an important part of the Brandt operation, according to Mr. Brandt. The firm is a factory-authorized service station for several appliance lines and makes a practice of keeping quite a stock of repair parts.

Refrigerator repairs were formerly handled by the service department, but that has been given up.

"We have found that there wasn't enough volume for us on refrigerator servicing," he explained. "The introduction of sealed units has resulted in less and less servicing, so we have farmed that work out."

G-E Receives \$272 Millions Of Orders In First Quarter

SCHENECTADY — Orders received by the General Electric Co. during the first three months of 1947 amounted to \$272,539,000. This compares with \$285,318,000 of orders received in the last three months of 1946.

Following customary practice, and in addition to the sales value of products which normally cannot be shipped immediately upon receipt of the order, these figures for orders received include the sales value of products actually shipped during each respective period.

Perishables Stay Fresh Here



Customers enter L. S. Turpin's refrigerated Green Room through one door, select their fresh fruits and vegetables and then leave by the other. A frozen food and ice cream display case is in the foreground. Temperatures within the room are maintained at 50° F., or a little higher in the hot summer months.

Refrigerated Display Room Keeps Fruits, Vegetables Fresh and Customers Cool for Kansas City Grocer

KANSAS CITY, Mo.—L. S. Turpin's store, 7106 Wornall Rd., here, has solved the problem of keeping produce fresh and crisp all day long by maintaining its produce department in a special refrigerated room known as the "Green Room."

Located in the northeast corner of the store, the "Green Room" is 12x20 feet, and has one entrance and one exit so that customers move in a continuous stream, thus preventing them from bumping into one another. It is kept at a temperature of 50° F. practically most of the year, except for the hot summer months, when this is raised a few degrees to provide for customers' comfort. The temperature under the counters always is from 40° to 45° F.

The refrigerating coils for the department are located in the rear wall of the room. A fan circulates the cold air and maintains humidity.

Produce, both perishable and semi-perishable, is visible to customers whether they are inside of the store or on the outside. This was accomplished by setting up the produce department in front of the display window facing the street and installing refrigerator-type double glass windows.

Inside the store, the same type of glass is used to separate the produce

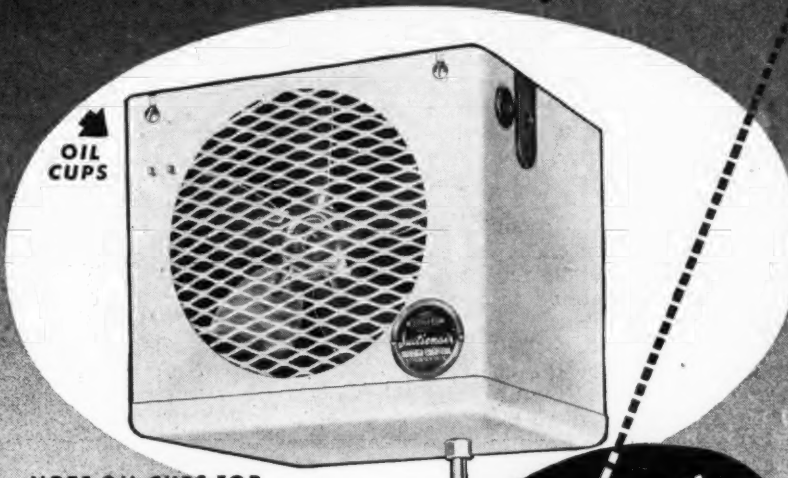
department from the other sections of the store. By using insulated entrance and exit doors with glass tops and wooden bottoms, visibility from the store was further increased.

Mr. Turpin has placed his frozen foods and ice cream displays just outside the entrance to the refrigerated room because of the high amount of traffic entering it each day.

According to Mr. Turpin, before the refrigerated produce room was constructed, the produce looked crisp and fresh when first put on the counters or in bins, but later in the day, the fruits and vegetables took on a wilted appearance, with the result that a decided decline in sales was noticed. However, all this has been overcome since the produce is kept in the "Green Room."

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in Performance



NOTE OIL CUPS FOR EASE OF SERVICING

New, Improved,
Beauty of Design...
Completely self-contained

"RECORD"
TINY MITE
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Weber Showcase Makes \$1,305,704 Net Profit In '46

LOS ANGELES—Weber Showcase & Fixture Co., Inc. here earned a net profit of \$1,305,704 during 1946, which, after allowance for a full year's dividend on preferred stock now outstanding, was equal to \$2.94 per common share, Karl Weber, president, reported to stockholders recently.

He also announced that orders received during the first three months of 1947 exceeded \$5,000,000.

"This," he said, "is at the rate of \$20,000,000 per year which is not in excess of the capacity of our present manufacturing facilities, provided materials are available in sufficient quantities."

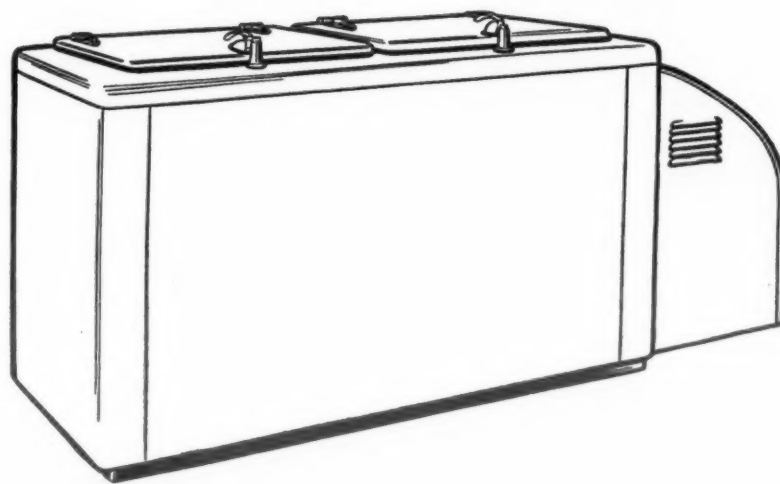
In reference to the 15-cent dividend payment made on April 1, 1947, Mr. Weber declared that "if the financing now under consideration is consummated, it is the intention of the management of Weber Showcase & Fixture Co. to recommend distribution annually of a substantially larger portion of earnings as dividends than the annual rate indicated by the initial payment."

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What To Do and What Not To Do In the Cooking of Frozen Foods

By Mildred M. Boggs, Western Regional Research Laboratory,
U. S. Department of Agriculture, Albany, Calif.*

The cook can ruin the finest vegetable. In only a few minutes she can reverse the results of ideal handling by the grower, field man, processor, warehouseman, shipper, and distributor. On the other hand, if any one of these men has failed, she cannot repair his damage.

A simple guide to the cook's part in the production of excellent frozen vegetables is—enter solidly frozen or partially thawed vegetable into the smallest amount of water that will prevent scorching, and cook it in a tightly covered pan for the shortest time which yields a texture the family likes or can learn to like.

I add the phrase "can learn to like" because so frequently people prefer vegetables cooked for shorter periods than they are used to when they break precedent and try them. The vegetable should be well seasoned, of course, and served immediately after cooking.

It is difficult to do things the right way unless we know the reasons for doing them right and unless we know what happens when we do them wrong. So we shall discuss the directions just given.

The most important part of the directions is the cooking time. One reason for this is that overcooked first and third-grade vegetables look and taste much alike, so if we serve

them overcooked we may as well buy cheaper ones.

If we serve overcooked vegetables, we probably do not like them much. We may eat them because they are good for us, but we would eat more if we really liked them.

I would guess that Chinese cookery of vegetables is better liked by many Americans than our own methods,

even though we may not like all the kinds of vegetables they use. As one Chinese girl told me, they really do not cook vegetables, they just frighten them. Also they season more and in wider variety both with meats and sauces. We frequently add nothing but butter or margarin.

What happens to color, flavor, and texture when we cook too long? Let's take up color first. Slight overcooking causes little change in color of yellow and white vegetables such as corn and cauliflower, but green ones are very sensitive. Bright, attractive green rapidly changes to dull, ugly, tarnished brass color.

One minute too much usually makes the difference between attractive and unattractive Brussels sprouts and a few minutes too much spoils the appearance of any of the green ones. You probably know the reason for this. Chlorophyll changes into a different chemical.

What happens to flavor? Many flavoring substances are volatile and go off with the steam. The longer we cook the more of these we lose. Others dissolve readily in water or salted water. You probably have noticed the sweetness of the water in which peas and corn are cooked. Nitrogenous material, mineral salts, and organic acids also contribute to flavor and most of these dissolve in water too. Again, the longer we cook the more we lose.

Finally, with overcooking certain

Table 1—Skin Texture of
Frozen Peas

Lot	Size	Penetration Values		
		Boil 5 min. kg.	Boil 10 min. kg.	Boil 15 min. kg.
A	5	.22	.18	.19
A	6	.29	.27	.25
C	7	.36	.27	.19
A	7	.46	.43	.34
D	4	.61	1.00	.93
B	5	.62	.64	.57
B	6	.72	.85	.81
E	5	.75	.73	.66
D	5	.77	.90	.96
B	7	.85	.87	.89
F	5	.87	.88	.88
E	6	1.09	1.24	1.14
G	5	1.21	.71	.72
E	7	1.65	1.63	1.47
F	6	1.67	1.10	1.16
G	6	1.87	1.02	.97
F	7	2.09	1.31	1.45
G	7	2.32	1.26	1.37

Grade A—.48 kg. or less; Grade C—.88 kg. or more.

Table 2—Recommended Cooking Periods for Frozen Vegetables

Vegetables	WRRL*	T&E†	NFFA‡	WFFPA§	Commercial Packages¶
Asparagus	5-8	5-8	7	7	5-18
Beans, snap		12-15			
whole, or cut	12-15		15	15	8-18
French cut			7	10	10-14
Beans, lima		16-20			11-20
Fordhook	6-10			8	
Baby potato	6-10			8	
Henderson	15-18			15	
Broccoli	5	5-7	7	5	5-10
Brussels sprouts	4	3-4		5	3-8
Cauliflower	4-5	5-8	5	4	3-12
Corn, cut	5	3-4	5	5	2-8
Peas	5-7	6-8	7	7	5-10
Spinach	5	4-6	5	5	3-8

*Western Regional Research Laboratory. †D. K. Tressler and C. F. Evers, The Freezing Preservation of Foods Avi. Pub. Co. 1947. ‡Northwest Frozen Foods Association. Meeting, 1946. §Western Frozen Foods Processors Association. Meeting, 1946. ¶Directions on packages exhibited at † and §. ||Appeared to be this type of lima bean.

chemicals in the vegetables change into new ones with new flavors. We may prefer these developed flavors and if so I offer no argument, but we should know how we get them and how to avoid them. The strong flavor of overcooked cabbage and similar vegetables has been attributed to the decomposition of sulfur compounds. Another example is the hydrogen sulfide and mercaptan from sufficiently heated peas.

Now, what about texture? When vegetables are overcooked, probably it is because the cook is trying to make the vegetable tender enough for her tastes. She may not accomplish this even when she doubles or triples the normal period.

We do not know whether toughness resulting from overmaturity, delay, hard water, and perhaps other causes all behave toward cooking in the same way. It is certain that some kinds of toughness can not be made tender by any amount of heating which leaves a product we still recognize as vegetable.

Some Soften Unevenly

Another consideration is that one part of the vegetable may soften but another remains unchanged. Some frozen asparagus and many snap beans contain fibrous parts. When we cook them longer the fleshy part softens but it appears that the fiber does not. At any rate, the fiber seems tougher by contrast with the mushy part.

The skins of peas behave this way too and we have mechanical verification of this. Campbell, Schwartz, and Boggs reported this a few years ago. They cooked several sizes of each of 7 lots of frozen peas for 5, 10, and 15 minutes and measured the load in kilograms required to penetrate the skins with a ball-bearing point.

Tasters considered the skins grade "A" (Table 1) when penetration values were .48 kg. or less, grade "C" when .88 or more, and "B" for values between .48 and .88. Skins which received a grade of "A" after 5 minutes of boiling changed little with 10 minutes additional cooking; none of the grade "B" skins became grade "A" and only one of the "C"s moved up to "B." Some of the skins actually became tougher with longer cooking.

Observations indicate that skins of corn behave in the same way, but mechanical measurements of them have not been made.

Since we consider overcooking so serious a fault we would like to give the consumer just one cooking time for each vegetable. We cannot do this, but we can narrow the boundary lines.

Factors in Cooking Time

Some things which influence the exact time are the maturity and variety of the vegetable, the size of pieces, scalding time, perhaps other processing procedures such as delay and freezing rate for certain vegetables, and last but not least the tastes of the person who eats the vegetable.

The recommended cooking periods from several sources for the commonly frozen vegetables are summarized in Table 2.

In all instances the cooking times in the table probably refer to the time after all frozen masses are broken apart and the water boils again following the addition of the vegetable to the boiling water. There is no serious disagreement in recommendations in the first four columns of the table except for lima beans and it is likely that the Tressler and Evers directions are for Henderson limas.

Difficult to Tell Type

It should be noted in connection with the package directions that in some instances we could not tell from the package whether the beans were Fordhook, Baby Potato, or Henderson type so we left all of them under the general classification. In several instances 18 to 20 minutes of cooking were recommended for limas which looked like and cooked like Fordhook or Baby Potato type.

This, as well as some of the other cooking periods recommended on the packages seem too long. You may think this is not important, but before you decide I hope you will cook some samples for varying periods and put them side by side on a table and look at them and taste them. You probably should do this several times.

Usually our tasters select longer
(Concluded on next page)

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Here's How To Cook Frozen Foods--

(Concluded from preceding page)
periods when they first score such a series, but when they have to score them day after day, they choose shorter periods. Also you might overcook both grade "A" and sub-standard vegetables and try them.

Since some variation in cooking time for a given vegetable seems desirable you may wonder whether you should put any specific directions on the package. It seems to me that it is better to do so.

A housewife who is not familiar with frozen vegetables does not expect such short cooking periods and she may not even look at her vegetable during cooking to see if it is getting "done" until it is too late. If she looks and considers it "underdone" she will continue cooking but probably will proceed cautiously. If she has already gone over the top, nothing can be done. It seems to me that a guide, even though not exact, is better than none.

Peas Prove Interesting

We have some rather interesting results on peas which we call our market series. They include the cooking periods for pod peas of varying quality and varying process, the sugar and vitamin C content of these peas and the quality of the samples as determined by tasters. This work was done in cooperation with the staff of the Food Concentrates Section of this Laboratory. The complete results will not be published until after we have repeated the series this spring.

We compared peas frozen within 4 hours after harvesting and 1 hour after hulling, with dehydro-frozen peas within the same time limits, and with peas held in pods at 33° F. up to 18 days and at approximately 75° F. up to 7 days.

The dehydro-frozen product may be new to you. In this process the food is dehydrated to about 50% of its original weight, then frozen. When we set up this experiment we presumed that freezing and dehydro-freezing caused some loss in quality, but that the quality was quite stable during freezing storage.

How Two Types Differed

We expected the two lots of pod peas to deteriorate progressively, but at different rates. We wanted to know at what stages the market peas were superior to, equal to, and poorer than the processed one.

The cooking periods and quality of the various lots of peas of the market series are summarized in Table 3. The cooking period for the processed peas was the same throughout the 18 day trial, but the pod peas changed during this time and we did cooking trials on them each day. We cooked these peas for varying periods from definitely "under-done" to "over-done" and part of the regular taste panel selected the best cooking period.

The periods selected for the iced pods were 5 minutes for the strictly fresh material, 6 minutes the next day, 7 minutes after 4 days and 8 minutes after 18 days. The peas

held in the pods at room temperature changed more rapidly and we increased the cooking period to 7 minutes after 2 days and 9 minutes after 7 days for them. Thus we almost doubled the cooking time after holding the pods for 1 week at 75° F.

The fact that strictly fresh pod peas and frozen peas from the same lot required the same cooking time is of interest because frequently we see directions to cook frozen vegetables for one-half to one-third the time for fresh ones, but this did not apply here.

Kept Nine Times As Long

You may be surprised at the rate of deterioration in the eating quality (Table 3) of the pod peas. The peas from the cooled pods decreased some in quality after 1 day and again after 14 days but still were considered fair after 18 days. The peas from pods held at room temperature decreased to fair after 2 days and poor after 3 days. It should be mentioned that after shelling, the peas deteriorate much more rapidly than when they are held in the pods. As was expected the peas lost some quality during processing, but did not change during the short period of freezing storage. The decrease in quality for the iced pods was due primarily to loss or fading of characteristic pea flavor.

The room temperature delay, however, caused all of the changes we associate with over-maturity. The pea flavor and sweetness decreased and slight bitterness developed. The cotyledons became starchy and the skins tough. The paired tasting technique was used in obtaining the quality data.

Rapid Loss of Sugar

Apparently, a good way not to have sugar in peas is to hold them at room temperature. They lost 13% in 1 day and 79% in a week. The losses during processing were surprisingly small.

The loss of sugar during cooking was 18 to 21% for most of the pod peas, but only 13 to 15% when they reach the starchy, low sugar stage. The processed peas lost a slightly higher percentage during cooking, 26 to 28%, but still contained as much sugar as the peas held in the pod for 1 day at room temperature.

It is of interest that the tasters said the peas had no sweetness when the sugar content of the raw peas decreased about 50%.

Vitamin C is another of the constituents that dissolves in water. About 20% of the vitamin C was lost during the entire freezing or dehydro-freezing process, or during holding of the pods for 18 days at 33° F.

When the pods were held at room temperature the peas lost their first 20% in only 2 days and a total of 60% in a week. The losses during cooking were about 35% for most of the samples.

The amount of sugar and vitamin C lost during cooking give some indication of the loss of any of the water soluble constituents. Since the

Table 3—Cooking Periods and Quality of Peas

Holding Period In Days	Minutes of Boiling		Quality*					
	Pods Held at 33° F.	Pods Held at 75° F.	Frozen Peas	Dehydro-Frozen Peas	Pods Held at 33° F.	Pods Held at 75° F.	Frozen Peas	Dehydro-Frozen Peas
0	5		5	5	E		G	G
1	6	6	5	5		G	G	G
2		7	5	5		F	G	G
3		7	5	5		P	G	G
4	7	7	5	5	G		G	G
7	7	9	5	5	G		G	G
9	7		5	5	G		G	G
14	7		5	5	F		G	G
18	8		5	5	F		G	G

*E—excellent; G—good; F—fair; P—poor.

latter contribute both to flavor and proper nutrition we should do our best to minimize their losses. We have spent a good deal of time discussing how long to cook frozen vegetables and what happens during cooking, but we think the emphasis is right. Now we shall turn to some other variations.

We said that you can start the cooking with solidly frozen or partially thawed vegetables. So far as I know, no one has shown that mild thawing is an advantage or disadvantage for most vegetables as far as quality is concerned. We have tried both ways and from scoring results detected no differences except those we shall mention in a minute. Also we have made mechanical measurements on skins of peas handled in the two ways.

We found that thawing for 24 hours at 46° F. or 7 hours at 76° F. prior to cooking had no effect on the skin texture but refreezing following thawing toughened them considerably.

Though there probably is no qual-

ity disadvantage to mild thawing, there is the chance that if the housewife does thaw at all, she may hold the vegetables in the thawed state too long.

Corn on the cob is one vegetable that definitely should be thawed. Otherwise, the cob contains ice when the kernels are 'done.'

It may be convenient sometimes to thaw any vegetable that freezes in a block, such as spinach. However, the heat can be held low during the first stage of cooking until the mass can be broken apart but the outside leaves should not be allowed to boil before the center is thawed.

Also there may be an advantage in partially thawing vegetables like broccoli and asparagus. Their tender tops may be broken when we try to separate the pieces during the first part of cooking. It might be worth mentioning that careful cooks sometimes cook these vegetables upright in the pan for part of the cooking period so the tender heads get less heat.

We recommended entering the

vegetable into boiling water and using a small amount of water. Both are for the purpose of holding losses of flavoring and nutritive substance which dissolve in water at a minimum.

By a small amount of water we mean ½ cup or slightly less for 5 to 6 minutes of cooking, about ¾ cup for 8 to 10 minutes, and about 1 cup for 15 minutes.

More Water When Heat High

More water is needed if the heat is not turned down when boiling starts or if much steam escapes around the cover of the pan. Even this small amount of cooking liquid may be boiled down, practically to dryness, in the last minute or two of cooking. Peas and corn taste considerably sweeter when this is done.

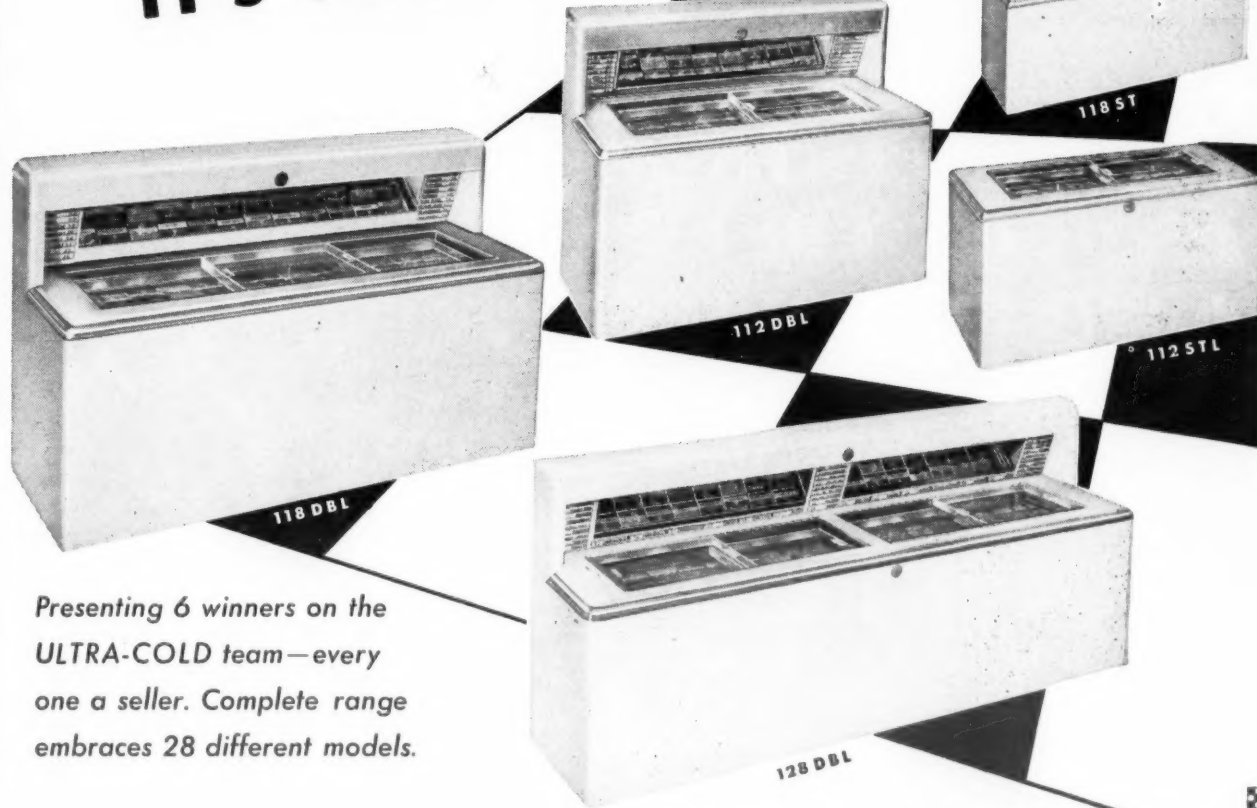
Sometimes limas and peas are allowed to stand in the cooking water for a few minutes after cooking in order to plump them, and, of course, this involves cooking in water to cover them. The method does give a less wrinkled product but has all of the disadvantages of cooking in large quantities of water.

The cooking method we recommended was to cook in a covered pan, using a small amount of water.

A steamer or waterless cooker accomplishes about the same results. You probably know that some steamers are made so the condensed steam drains back into the bottom unit rather than over the vegetables, leaching them. This is a good type.

When the waterless cooker is used, if no water at all is added, some water is withdrawn from the vegetable to make the steam, and we have observed that some vegetables look rather shrivelled by this method.

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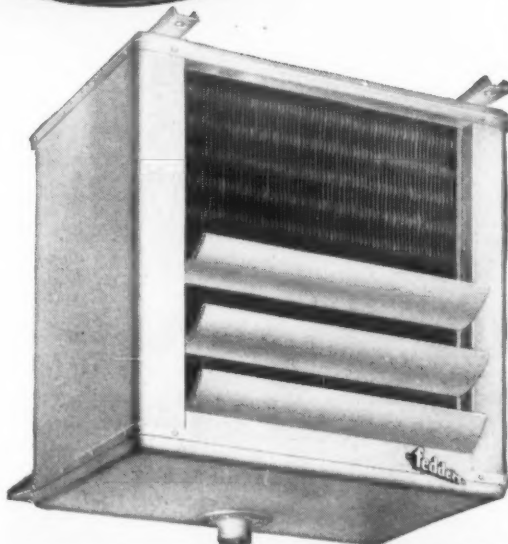
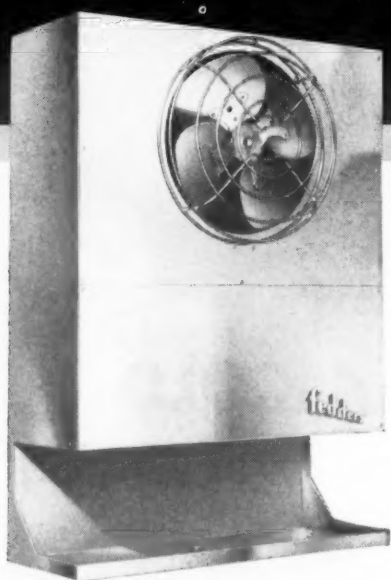
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Where Will It All End?

HAND over hand we are all climbing a frayed rope toward an inflationary debacle. All that goes up must come down, according to the established laws of gravity and economics.

Everybody is trying to grab too much while the grabbing is good, it seems. And everybody you meet is worried about the future—but few individuals are worried enough to do anything themselves about reversing the inflationary trend.

Large enterprises are crowding small ones out of the picture. And although only one quarter of the total number of employed United States citizens are members of labor organizations, it is this minor group which is still trying to get more for doing less—thus forcing prices up, and making it tougher for the rest of us.

When collective bargaining results in boosted incomes for the few—consumer prices are hoisted accordingly. So the majority groups of consumers—those who have received no raise in their paychecks—are forced to pay the resulting higher prices along with their more fortunate union brethren. That spells I-N-F-L-A-T-I-O-N.

Today, nearly everyone who wants a job is on some firm's payroll. And many jobs are exceptionally remunerative. Demand for many consumer items is at an all time high, because the war economy deprived us of so many items we wanted and needed.

But in spite of all these favorable circumstances, many of us can't purchase the things we want or really must have. Either we can't afford these things, or they aren't available. Prices spiral upward while production lags. Thus all consumers sigh and wait for "better times."

Yet, the unions keep on trying to raise *real income* by its bootstraps to offset "the soaring cost of living." That does nobody any good—least of all, John Q. Public.

Nevertheless, this dog-chasing-its-tail sort of thing goes on and on—a vicious and futile circle which never ends.

Money loses much of its value when we can't exchange it for the goods which we want and need. Our gross wages melt away to an impotent lump as a result of wasteful taxation. The remaining pittance is quickly dissolved by necessary expenditures for those food-and-clothing necessities which seem to cost more and more as time goes on.

With employment and wages at a high level, and a tremendous demand for merchandise, what is causing this frustrating situation? And what can we do to alleviate it?

Increased production, along with fewer tax-supported government employees and mendicants, comprise the only apparent solution to this dilemma. A more efficient day's work from each and every laborer and workman-worthy-of-his-hire, plus heavy-handed curtailment of the waste and free spending now indulged in by the bureaucrats, might drag us out of the mire of inflation, and reduce the presently intolerable High Cost of Living.

We may as well face it. We can't "get something for nothing." If each one of us would buckle down and place his proboscis to the proverbial grindstone, we could, in all probability, once more obtain the things we want and need at a proper price.

"An honest day's work for an honest day's pay," is a mighty sound slogan.

And this slogan is particularly applicable to the loafers who are now enjoying a "free ride" in government agencies, and to the aristocrats of labor who haven't learned yet that the vast bulk of American voters have lost patience with unjustifiable demands.

The honeymoon is over. Loafers and "free riders" can't be tolerated any longer. Nor, incidentally, can profiteers be stomachached. If all of us don't get down to work quickly, and quit trying to squeeze the last drop out of the lemon, our present false prosperity will collapse.

Benjamin Franklin once said:

"Unless we all hang together, we'll all hang separately."
And that's the moral to this story.

Refrigeration, Air Conditioning Seen Aiding Industrial and Educational Growth of South

NEW ORLEANS—The vital role refrigeration and air conditioning is playing and will continue to play in the industrial development of the South was outlined before the Louisiana Engineering Society recently by Sterling F. Smith, general sales manager of Baker Ice Machine Co., Inc.

"With refrigeration and air conditioning supporting your industrial progress, thus making possible a high standard of living and education, the South will move into its rightful place in the nation's economy," he declared.

"Insofar as comfort cooling is concerned, which in an industrial empire is a necessity, I feel safe in making the prediction that within five years no first class commercial or residential property will be rentable or saleable in the South unless air conditioned," he asserted.

"Frankly," he added, "this will not be confined to the South."

"Just as the development of the heating system made possible the progress of industry in colder climate, the air conditioning plant will contribute to the health and efficiency of the worker in the warmer climate of the South," Mr. Smith averred.

"We all know that with the modern air conditioning system we can produce any climatic condition at will. From the standpoint of working conditions, the whole country has been placed on an equal basis through air conditioning."

"In fact, I think that in this regard the South has the edge."

He Prefers Warm Climate

"Personally, I would much rather work in an air conditioned plant in a warm climate than the same plant with the best heating system in the world in zero weather. However, that is but a personal observation."

Mr. Smith told the Southern engineers that "this is an age of creative industry and the refrigeration and air conditioning industry is creative."

"I believe it is safe to say," he said, "that ultimate achievements attained by American industry to raise living standards will be directly traceable to the products of the refrigeration and air conditioning industry."

"This industry has immeasurably extended its field of service in the last 10 years. The four years of World War II advanced the art of refrigeration equipment application a decade."

"Because of this advancement the products of the industry may well be regarded in the same light as machine tools or any other basic tool which aids in an industrial plant's processing and manufacturing work."

"In the chemical industry the refrigerating compressor is as important as the catalyst."

"Many chemical plants could not function without refrigeration or air conditioning in some form. The syn-

thetic rubber industry is a prime example. The production of synthetic rubber would be impossible without controlled temperatures."

"The multiplicity of uses of refrigeration in the petroleum industry are well known. Consider the fact that the production of high octane gasoline would be impossible without the refrigerating compressor."

"The rayon industry is another prime example. We all know that this could not function without controlled temperature and humidity. Then, too, the spinning of cotton requires air conditioning to maintain quality."

"The growing industrial empire of the South and the corollary expansion of industrial and commercial uses of refrigeration and air conditioning make a happy combination."

"Mechanical refrigeration, as applied to food processing and distribution, has already made possible a great expansion of food products from the farms of the South," he continued.

"Consider the citrus fruit industry of Texas and Florida as an example—long term controlled temperature storage makes possible orderly marketing so that the orange and the grapefruit is now a year around contribution to our joy of eating."

"There is also taking place a great increase in Southern food processing industries, such as meat packing, quick freezing, and the processing of dairy products."

"These industries all depend on refrigeration and I need only to make passing mention of the immense Gulf fishing industry, dependent upon refrigeration from the time the fish or shrimp leaves the water until it hits the pot or pan from Maine to California."

"It seems a far cry from refrigeration and industry and refrigeration contributing to the raising of the educational level. However, each

factor we have mentioned complements the other."

"The products of the refrigeration and air conditioning industry are making a definite contribution to the raising of educational standards."

"The school lunch program is an example. A well fed stomach contributes to peace of mind and a mind at ease absorbs ideas readily."

"The most important is the coming use, and I make this a definite prediction, of air conditioning in Southern schools. This will lengthen the school year and make school a more desirable place in which the minds of the Southern youngsters can be trained."

"No longer need the school year of the South be cut short by climatic conditions or the actual attendance record of the Southern pupil be cut short by the necessity of contributing to the supply of hand labor required to operate the farm."

Longer School Year

"The Southern pupil will, through farm mechanization and the raised standard of living of the industrial economy, be able to spend his full time in school and air conditioning will lengthen his school year."

"Pupils in the state of Washington, for instance, a semi-industrialized state, had an average attendance in 1940 of 152 days per year. Pupils in the three Southern states of Arkansas, Mississippi, and Alabama averaged 123 days per year."

"Better education will contribute to better living and better business. There is a direct relationship between income and educational level."

"We have explored some basic things regarding the industrialization of the South, the mechanization of the farms to provide labor for the industrial plant, pointed out the corresponding inevitable increase of the standard of living and also the corollary increase in the educational level."

California Contractors Ask Industry Council To Help Petition FTC for Probe of Unfair Trade Practices

SAN FRANCISCO—The National Refrigeration Industry Council, and its member organizations, have been formally requested to participate in the petition to the Federal Trade Commission for an industry-wide investigation of alleged unfair trade practices of the dairy, ice cream, frozen food, and beverage industries, initiated last September by the Refrigeration Contractors Association of Northern California.

The plea was contained in letters to the Council and each of its four national groups: Refrigeration Equipment Manufacturers, Refrigeration Equipment Wholesalers, Refrigeration Contractors, and Refrigeration Service Engineers Society.

Pointing out that the avowed purpose of the Council was the solution of industry-wide problems, Zed E. Jones, secretary-manager of the California association, wrote:

"I would like to suggest the possibility of the Council taking up aggressively the matter of unfair practices not only of the dairy and ice

cream companies all over the country but also the unfair competition of the frozen food industry and the beverage cooling industries as their operations relate to refrigeration."

"I suggest that the Council be asked to take steps immediately to request the Federal Trade Commission to institute an industry-wide trade practice conference procedure under the rules of the Commission."

"Official statements, often repeated, by the Commission are to the effect that proceedings of this character operate to aid business through establishment of rules intended to eliminate and prevent unfair methods of competition and other trade abuses in industry and to maintain business practices on a high plane of ethics and fairness in harmony with law."

C. T. Sadler, San Francisco FTC chief, has "suggested that our industry take the fullest possible advantage of the Commission's facilities for the elimination of unfair practices," wrote Mr. Jones.

THE Triple FUNCTION UNIT FOR COMPLETE FOOD PRESERVATION

Cools... Freezes... Preserves



Amana MODEL 200 FREEZER-COOLER

The complete unit. Ideal for all food freezing and storing needs. Features a 23 cu. ft. zero compartment. Heavy duty freezer plates for fast contact freezing. 100 cu. ft. walk-in cooler for full dressed carcass meats—dairy products—and other foods. Unit construction means easy installation. The Amana Complete Line offers you the finest opportunity in the industry for immediate sales and profits.

FOR THOSE WHO WANT A FREEZER ONLY

Amana MODEL 30R

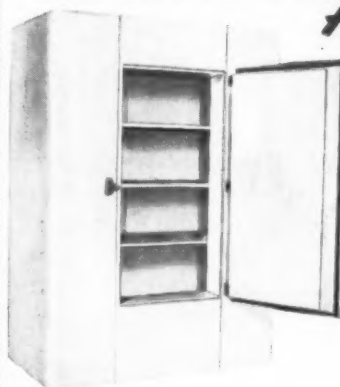
Compact, convenient, large capacity (30 cu. ft.). Get all these features at lowest cost.

MODEL 110

10 cu. ft. capacity.

MODEL 50

5 cu. ft. capacity.



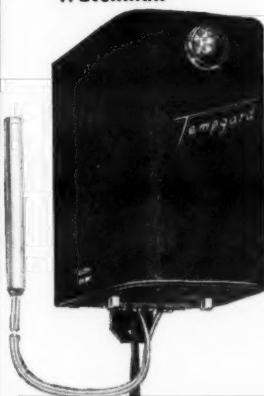
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The Amana franchise may be available for your territory. Write, wire, or telephone at once for details.

REFRIGERATION DIVISION

AMANA SOCIETY, AMANA, IOWA

★ The 24 hour Watchman



Prevent food storage losses! When power fails TEMP-GARD warns you. Sensitive Bi-metal Power Element activates visual and audio warning when Box temperature rises above 10°. Available with variable temperature adjustment. Easily installed. Representatives and Distributor inquiries invited.

WATCHMAN REFRIGERATION CORP.

483 MAIN STREET

★ GLEN ELLYN, ILLINOIS

For Liquid Cooling.... use

HEAT-X

CAST ALUMINUM LIQUID COOLERS

Stainless Steel Multi-Circuit Cooler for Beer and Beverage applications.

Other models available with Single or Multi-Circuits for Dispensers — Soda Fountains — Water Coolers.

See your jobber for literature. Ask to see the Complete Heat-X Line.

THE HEAT-X-CHANGER CO., INC.

415 LEXINGTON AVENUE, NEW YORK 17, N. Y.

BREWSTER, N. Y.

P-I-E Keeps Trucking Cargo at Low Temperature With Separate Gas-Driven Unit, Cold Air 'Bath'

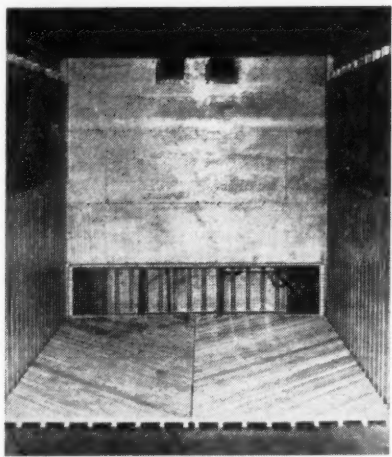
SALT LAKE CITY, Utah—Development of a mechanical truck refrigeration unit driven by an independent gasoline engine for use on its fleet of trucks operating on routes between California and Chicago has been announced by Pacific Intermountain Express, one of the largest common carriers of its type, according to R. F. Allyne of P-I-E's refrigeration department.

Refrigeration is accomplished automatically to maintain a precooled cargo at its precooled temperature, including frozen foods at or near 0° F., with a range of from 0 to 70° F., he states. The inside temperature can be manually selected by turning a cold-control knob on the thermostat.

UNIT OUTSIDE, BLOWER INSIDE

The complete refrigerating mechanism weighing 1,373 lbs. is divided into two assemblies, the power-condensing unit being located outside the trailer, mounted beneath the body, while the evaporator-blower assembly is mounted on the front wall of the trailer interior.

Electrically driven fans force air with an outlet velocity of 4,400 c.f.m. along the top of the interior towards the rear. Specially designed floor racks permit rear-to-front passage of air with minimum obstruction to the warm-return intakes at floor level at the forward bulkhead of the trailer, it is claimed. Stripping



Evaporator coils in the P-I-E truck line installations are mounted in the forward end of the trailer, air outlets being at top and return air intake at floor level. Note air passages beneath floor racks.

at the top, sides, and rear also provides space for air circulation.

A four-cylinder air-cooled gasoline engine provides the power. It is connected to the two-cylinder V-type compressor through a centrifugal clutch. A fan on the engine crankshaft at the forward end pulls air through the condenser coil ahead of the engine and back across the engine-compressor assembly.

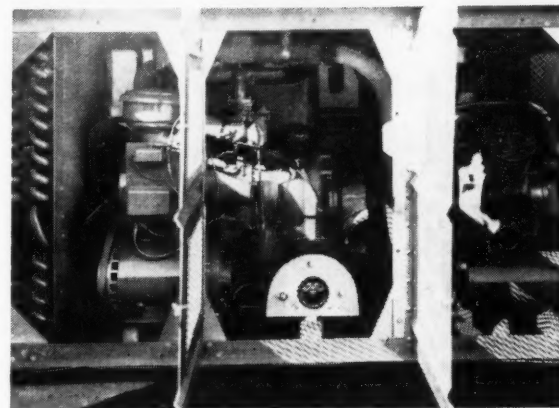
Control of the compressor is accomplished by regulating the speed of the driving engine, points out Mr. Allyne. The engine never stops completely, unless, of course, the ignition is shut off manually. The engine is either idling at about 900 r.p.m. or running at a governed speed of 1,750 r.p.m. The centrifugal clutch engages or disengages when the engine speed is approximately 1,200 r.p.m. Refrigeration is produced only when the compressor is operating, and the compressor operates only when the engine is at the full speed of 1,750 r.p.m.

KEYED TO THE ENGINE

This arrangement makes it possible to control the refrigeration by regulating the engine, which is accomplished by a thermostat which energizes a solenoid-actuated throttle. The controlling thermostat is responsive to its bulb located in the warm air return under the evaporator coils within the trailer body.

Several advantages are claimed by P-I-E for this control arrangement, according to Mr. Allyne, who states, "It eliminates the danger of having to automatically start the cold engine and the attendant wear caused by cold lubricants. It reduces strain on bearings because the engine is 'revved' up before the compressor load is imposed. There are fewer controls, and a smaller battery can be used with equal efficiency."

Compressor Set Under Trailer Body



A four-cylinder gas engine drives the compressor in the truck refrigeration unit developed by Pacific Intermountain Express, truck operating firm, for use on its own fleet. The condensing unit mounts beneath the body of the trailer.

Defrosting can be accomplished without disturbing the cargo, it is claimed, by means of a water spray defrost system, the water inlet and drain being located outside the trailer body.

This unit is being installed in heavily insulated aluminum trailers, and the unit is said to operate on a temperature differential of plus or minus 2° F. Importance of air circulation within the trailer is emphasized by Mr. Allyne.

"The cargo is 'floated' in a bath of cold air, or is wrapped in a blanket of circulating refrigerated air which intercepts the heat leaking through the insulation and carries it off before it contacts the cargo to raise its temperature," he states. "I stress this point because refrigerated equipment without this feature only agitates or stirs up the cold air on top, with no inducement to force the air all the way around the cargo at rear and underneath."

regrettable that trade barriers resulting from individual state laws and regulations will not allow a truck line engaged in interstate commerce to operate equipment of uniform size and capacity throughout the entire territory served by P-I-E.

"For the shipper's protection and ours, we do not wish to accept any shipments of frozen foods involving a connecting carrier at destination or origin, at least not until refrigerated trucks with improved performance are more generally available."

"At present there are 15 reefers operating between California and Denver, and by mid-summer there will be 10 of a slightly different size operating between Denver and Chicago. West of Denver the maximum cargo weight is about 39,000 lbs. (it varies only a few hundred pounds with each piece of equipment) with a net cargo space of 1,441 cu. ft. This is after allowing for stripping."

LOAD ALTERS CIRCULATION

"There can be only one result with this performance deficiency—uneven temperature distribution," he avers. "It does not follow that a body providing excellent temperature distribution when empty will do the same thing loaded. I am sure that a thorough temperature study in all locations in loaded equipment would reveal facts about uneven temperature distribution which would surprise some carriers."

With its new equipment P-I-E is prepared to handle truckload quantities of frozen foods or other refrigerated perishables between the following points: Los Angeles, San Francisco, Oakland, Alameda, Emeryville, Richmond, Berkeley, Sacramento, Stockton, Lodi, Tracy, Hayward, San Leandro, Reno, Salt Lake City, Ogden, Provo, Pocatello, Rock Springs, Rawlins, Denver, Colorado Springs, Pueblo, Kansas City (Kansas and Missouri), St. Louis, and Chicago.

EQUIPMENT NOT UNIFORM

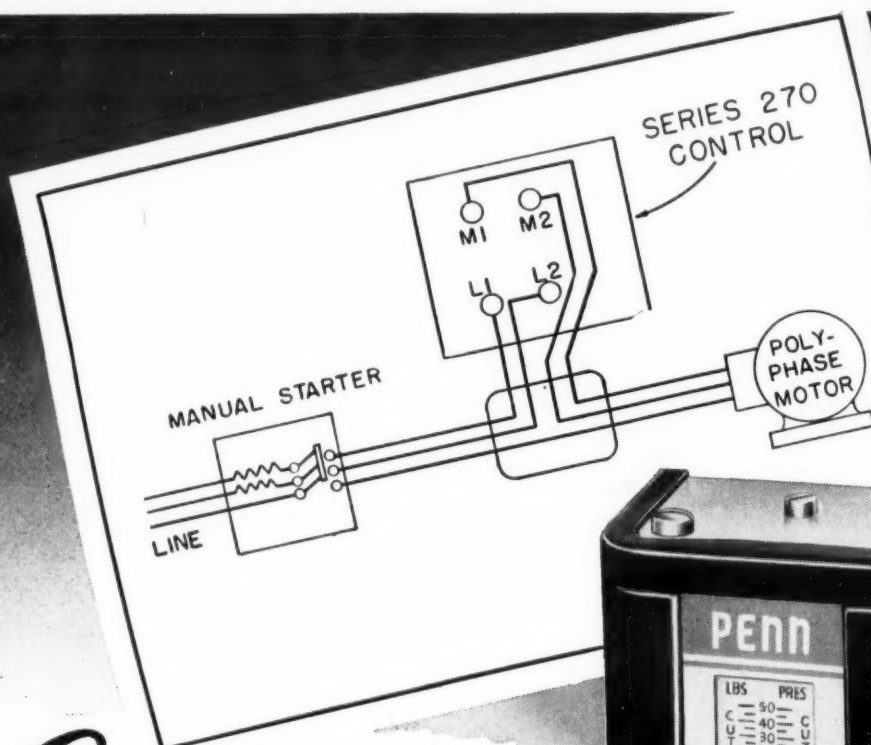
Commenting on related problems of truckers, Mr. Allyne says, "It is

MOST PERISHABLES: 29,000 LBS.

"Between Denver and Kansas City it is about 39,000 lbs. and 1,351 cu. ft., respectively. Between Kansas City and Chicago it is about 29,000 lbs. and 1,351 cu. ft., respectively. In other words, the maximum cargo of perishables we could haul from San Francisco or Los Angeles to Chicago without drops prior to Kansas City is about 29,000 lbs."

In connection with P-I-E's expanded program Mr. Allyne is starting a tour of the company's system to acquaint the personnel with problems in handling refrigerated merchandise.

"All handlers will be trained to be alert for common errors, such as leaving trailer doors open during long delays like lunch periods, leaving perishables standing in the open, etc.," he explains. "On one of my many test runs, I have even seen the shipper wash off 30-lb. tins of frozen cherries with a fire hose—cherries which came out of a splendid cold room at 18° below zero, but which were well above zero after the washing process."



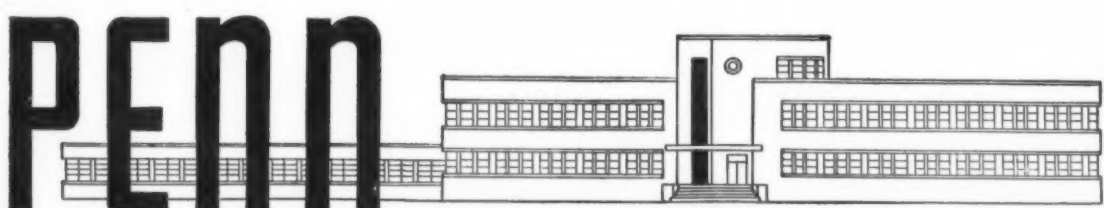
Controls polyphase motors without line starters

Yes, it's true! This PENN 270 Series Control requires no line starters to control polyphase motors of 3 H.P. and under (where protection against single phasing is provided). Shown above is a typical 3-wire, 3-phase hookup. Manual starter provides motor overload protection and control breaks 2 wires of the 3-wire circuit.

In addition, this new and different switch can control two separate load circuits. And when wired in single phase circuits as a 2-pole switch, it always breaks the "hot" line.

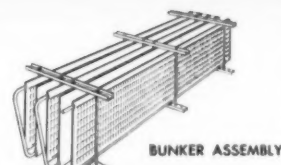
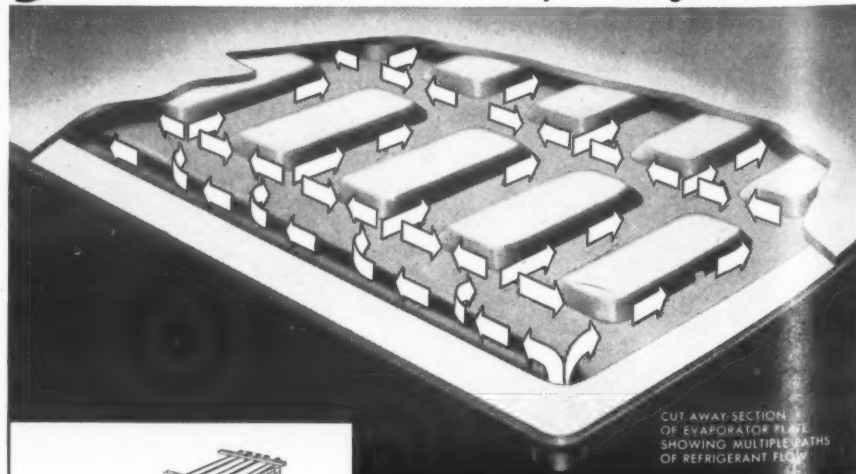
Be sure to get full details of this new 270 series. It means greater dependability, more efficient operation, freedom from contact trouble, better electrical performance, greater accuracy regardless of mounting position or vibration conditions, ease of installation and simple, easy adjustments. Penn Electric Switch Co., Gosben, Indiana. Export Division: 13 E. 40th St., New York 16, U.S.A. In Canada: Penn Controls, Ltd., Toronto, Ontario.

Series 270 and 272 PENN "Single" Temperature or low side pressure controls. Also (not shown) Series 271 and 273 PENN "Dual" Controls which combine in one unit a temperature or low side pressure actuated mechanism and built-in high pressure safety cut-out.



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BTC Evaporator Plates with special "Cross Flow" grid-iron construction require only two seconds travel for refrigerant gases to get out of the plate and back to the outgoing channel. This means all surfaces are constantly wetted and results in uniform refrigeration at low operating costs.

BTC PLATES have multiple paths for unobstructed and equal distribution of the refrigerant.

BTC PLATES assure low pressure drop for greater heat absorbing capacity and trouble-free refrigeration.

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Write for your copy of Bulletin illustrating applications for BTC Evaporator Plates

THE BREWER-TITCHENER CORPORATION
CRANDAL-STONE DIVISION --- BINGHAMTON, N. Y.

Where Moth & Heat Doth Not Corrupt**500,000 Fur Coats to Spend 'Vacation' In New \$750,000 Cold-Storage 'Resort'****Air Conditioning, Refrigeration In Chicago Vaults Will Help Guard Garments from 38 States**

CHICAGO—Half a million fur coats will travel to Chicago from 38 states this spring, spend their "summer vacations" in new cold storage vaults, and travel back home in the fall, ready for another long, hard winter.

Valued at well over 50 million dollars, the fur finery will arrive in specially padlocked containers and then undergo clinical scrutiny before being stored for preservation from heat and moths in a new \$750,000 plant now nearing completion in Chicago.

Details of the new "summer resort" for furs, just reported to the Refrigeration Equipment Manufacturers' Association, reveal a new grand-scale operation in the "cradle to grave" role of refrigeration and air conditioning which helps make more and better furs available and then helps keep them longer.

Refrigeration takes its place in the fur picture even before the pelts are made into fur garments. Fur ranchers throughout the United States have come to depend on frozen foods—horse meat, rabbit meat, muskrat meat, fish, meat scraps, and even tomatoes—to nourish their furry charges. Furs gathered by trappers are shipped to collecting points where they are kept in cold storage until enough are collected to warrant a fur auction.

KEPT COLD TILL SOLD

After the furs are processed and made into coats or sent to custom furriers, they are kept in refrigerated vaults until they are sold. Then, when Milady shops for her furs, air conditioning permits her to try on the warmest garments in perfect comfort, even during the hottest weather.

The life of a fur coat also is largely dependent upon refrigeration and air conditioning. Summer heat and moths would annually ruin millions of dollars worth of furs if it weren't for mechanically-produced refrigeration and mechanically-controlled humidity.

Once a fur coat reaches the new Chicago "summer resort" for fur coats, for example, it is inspected and cleaned. After these operations, which take a total of eight hours for each garment and which involve the use of both air conditioning and refrigeration, the coats are stored three-deep in four big refrigerated and air conditioned vaults, each of which contains more than 75,000 cu. ft.

Air conditioning and refrigeration find many applications in the cleaning process at the new plant. After the coats have been examined to

determine what repairs are necessary and have been made water repellent—a process that helps renew the "glaze" or sheen of the fur as well as make it resistant to water—they are put into huge padded cylinders where they are cleaned with wood flour and cellulose fibers.

As the "roto-filters"—the big cylinders—rotate, the wood flour works into the fur and acts as a mild abrasive to loosen all dirt that has lodged in the fur. The cellulose fibers absorb the loosened dirt and any oil or grease that might be present. The tumbling action within the cylinders generates enough heat to damage the furs so each "roto-filter" is ventilated with a forced draft of mechanically cooled and cleaned air.

SERVES DUAL PURPOSE

Air conditioning of the cleaning cylinders serves a dual purpose—it protects the furs from "sing" or excess curling because of too much heat and removes much dust that otherwise might find its way back into the fur.

After the coats are removed from their "dry bath," each is subjected to a whirling torrent of mechanically cleaned air that removes every trace of wood flour and cellulose fiber. This step in the cleaning process requires the use of another type of air conditioning unit that provides a large volume of dust-free air that has been cooled.

Still another step in handling the coats before they are put into the cold storage for the summer and one that again calls for air conditioning is combing and final glazing. The room in which this work is done in the new Chicago plant would be filled with dangerous fumes unless it were ventilated by an air conditioning system. The process also calls for streams of conditioned air to prevent singe which might otherwise occur because of the heat that is generated in the fur by combing, etc.

When the coat is completely cleaned, it is placed in one of the four big cold storage vaults where the temperature is always just 8° above freezing and where the humidity is held at 45%. This temperature and humidity are produced by specially designed air conditioning and refrigeration units—one for each vault—that have been built on the outside of the building.

PERMITS 'RECONDITIONING'

Inside the vaults, the fur coats are "triple-decked" on hangers. Catwalks on three levels between each row of sleek and clean garments provide access without the necessity of moving a single coat to get to another.

"Without air conditioning and mechanical refrigeration, it would be impossible for us to put warm fur coats back into 'new' condition and to protect them from the ravages of heat and moths during the summer months," says Walter L. Klein, president of Kleinzway, Inc., owner and operator of the new plant.

"Modern cleaning and fur storage, which depend so much upon man-made cold and controlled humidity, have helped make the fur coat an economical investment for most women," he added, explaining that, today, a fur coat can be worn for many seasons whereas, just a few years ago, it would be discarded after a few winters because facilities did not then exist for cleaning furs thoroughly and for protecting them against heat and moth damage during the summer months.

Kerotest Chooses Norris To Manage Coast Sales

LOS ANGELES—Appointment of James A. Norris as West Coast division sales manager for the Kerotest Mfg. Co. of Pittsburgh, and the opening of new division offices at 315 W. Ninth St. here has been announced recently by the company.



Warehouse stocks of valves and fittings will be carried by the division for West Coast distribution, company officials said.

Joseph A. Swaton and John H. Mueller will continue to serve as West Coast field representatives, they added.

Offices of the company were formerly located at 3305 East Slauson Ave.

New \$100,000 Wyoming Firm To Sell at Wholesale, Retail

SHERIDAN, Wyo.—Duncan-Dickinson, Inc., this city, has filed articles of incorporation in Wyoming to do both wholesale and retail business in household appliances and commercial refrigeration and related supplies.

Elwood D. Duncan, Leland E. Dickinson, and Kenneth Cox, all of Sheridan, are the incorporators of the new \$100,000 firm.

STAINLESS STEEL ALL VISION DISPLAY CASE

AV-6—Triple glass front. Top and bottom sliding glass doors in rear, mounted in hard rubber frames and sliding on hard rubber rails. Stainless steel interior, exterior and shelving. Comes equipped with coils and fluorescent lighting.



Really beautiful to see. Ideal Pastry Case, Dairy Case, Restaurant or All-Purpose Display Case. Plenty of display capacity. Easy accessibility and visibility through top and bottom glass sliding doors.

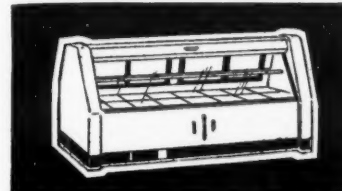
Length 6' Width 34" Height 52"
Standard 6' model or custom built to any length.
Minor changes can be made to suit your needs.

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Inquire about our complete line of Commercial Refrigeration equipment including Storage Boxes, Reach-Ins, Ice Cream Cabinets, Freezers, Dough Retarders, Florist Boxes, Bobtail Fountains and Creamer Units, etc.

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A FEW TERRITORIES STILL
AVAILABLE. INQUIRE TODAY!

FOGEL REFRIGERATOR COMPANY Since 1899
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**SOME PEOPLE
USE TOO MUCH
PLAIN TUBING**
*in heat transfer
applications*

**BOTH THESE PIECES OF
TUBING ARE THE SAME—in surface area**

The one-inch length of Wolverine Trufin®—the integral finned tube—(with 7 fins per inch) has the same surface area as the long nine-inch length of plain tubing. Both are 1/2" O.D. What does this comparison suggest to you?

Of course, compactness, efficiency and economy.

If you want high efficiency in your heat transfer equipment, consider the many advantages the use of Trufin has for you. Our Engineering Department can draw on a wealth of experience to help you with any heat transfer plans you may be contemplating.

*Catalog No. 074042

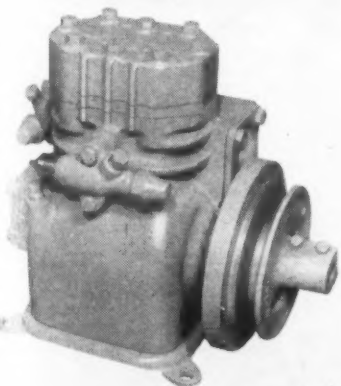
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CALUMET & HECLA CONSOLIDATED COPPER COMPANY

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WOLVERINE Trufin, THE integral finned tube, is available in 4, 6, 7 and 9 fins per inch. It can be fabricated as readily as plain tube.

TRUFIN, because of its all-one-piece construction, is not affected by vibration and sudden heat changes. THE integral finned tube is particularly recommended for use in all kinds of heat transfer work.

**DOVER Model - 151
High Speed compressor**

**THE SERVICE ENGINEER'S
IDEAL REPLACEMENT UNIT**

from
1/2 H. P. to 1 H. P.
at related speeds.

IMMEDIATE DELIVERY

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DOMESTIC and EXPORT

**PURO ELECTRIC
WATER COOLERS**

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DRINKING WATER
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refrigerated
Bar

for Home, Office and Showroom



49 1/2" high
36" wide
18" deep

SERVING BAR + ELECTRIC REFRIGERATOR + LIQUOR CABINET

ALL BLENDED IN A SUPERBLY ENGINEERED UNIT

ATTRACTIVELY PRICED FOR FULL RETAIL MARKUP
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Quality features
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profitably now!

- 63 ice cubes in one freezing
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WRITE OR WIRE NOW
FOR COMPLETE DETAILS

What's New

Flick-of-the-Wrist Dial Control

Just one setting of the dial on the right of the panel will put this 1947 Hotpoint automatic washer through the operations of soaking, washing, and rinsing. On the left side of the panel is a dial for the proper regulation of water temperature and washing time. Equipment includes a front plate for permanent installation or rubber wheels for portable. Capacity of the washer is nine pounds of clothes. Its dimensions are: 36 in. high, 25 in. wide, and 25 in. deep.



Appliance Truck Designed For Ease In Handling

LOS ANGELES—A new and scientifically designed appliance truck, known as the "Easload," has recently been introduced by the Colson Equipment & Supply Co. here.

One of the features claimed by the manufacturer is that the entire weight of the load rests on the 10-inch rubber-tired roller-balanced wheels. When the truck is erect, the wheels lock in a forward position for loading.

As the load is picked up, a foot pedal releases the wheels and they swing back, locking in balanced position to carry the load. Small rubber wheels under the toe plate assist in loading and unloading.

A double ratchet is provided for cinching either one or two 12-foot straps around the appliance.

Full protection to appliances is gained by rubber frame protectors. Rubber covered axle nuts avoid damaging other merchandise and furniture when squee-geeing the truck in tight spots.

The new appliance truck is built of all-welded steel with tubular frame. It has a capacity of 2,000 lbs. and weighs only 64 lbs.



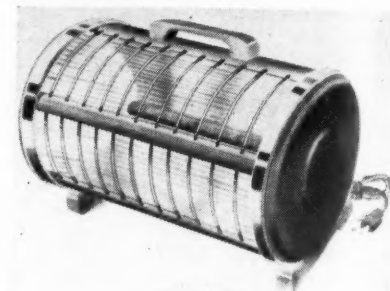
Rogers Makes Compact Air Units In 3-25 Ton Sizes

NEW YORK CITY—Self-contained air conditioning units ranging in capacity from 3 to 25 tons are now being manufactured by the R. B. Rogers Companies, Inc. here, Ralph B. Rogers, president, has announced. Compactness is said to be one of the outstanding features of these units. On the 7 1/2 and 10 ton air

conditioners, the filter section is shipped separately so that the units will pass through standard sized doors, according to Mr. Rogers.

The units are housed in 10 and 14 gauge steel cabinets according to size, Mr. Rogers declared. They are finished in neutral tones to harmonize with any decorative scheme, he added.

To installing contractors he explained that fresh air connections can be brought into the units on either side. There is also a choice of water and electric connections. Refrigerant filters and sight glasses are provided.



12-cu. ft. Harder-Freez Model Has 5 New Features

COBLESKILL, N. Y.—Five new features have been added to the 1947 model 12-cu. ft. Harder-Freez farm and home freezer, the Harder Refrigerator Corp. here, a subsidiary of the Tyler Fixture Corp. of Niles, Mich., has announced.

These new features are:

A rust proof wire Freez Basket which will hold up to 50 lbs. of food for processing.

A chrome plated instrument panel containing a low temperature thermometer, red warning signal, and temperature control.

Wire compartment dividers which can be placed at any desired position in the freezer to permit easier storing of food.

Heavy chrome plated hardware of the pressure lock type which is said to have no springs or gadgets to become worn and

which accommodates an ordinary padlock.

An E-Z Lift top cover which is claimed to open easily and stay in any position.

In addition, the Harder-Freez units are hermetically sealed to eliminate infiltration of moisture, the company declares. They are constructed of welded steel inside and out, it adds.



Room Heater Reflector Beams and Diffuses Rays

NASHVILLE, Tenn. — Equipped with a new type reflector which is said to beam as well as diffuse heat rays, the new Top Line cylinder type portable electric room heater is being marketed by Tennessee Valley Marketers, Inc. here.

The reflector is claimed to utilize natural updraft ventilation and combine reflection, radiation, and convection to give quick-economical heat. The heater stands 11 in. high and is 15 1/2 in. long.

Designed so that it will not tip over, the heater is safe on the finest floor or rug, the company says.

The heater is of electric welded steel construction and has nickel chrome wire wound on ceramic coils of high tensile strength, according to the firm. It has a heat-proof, baked enamel finish and chrome trim. The wood handle and feet are finished in blond maple.

It is rated at 1,240 watts, 110-120 volts, a.c. or d.c. Wiring is said to be completely enclosed and is tamper proof.

JORDON Delivers when the order calls for a REACH-IN

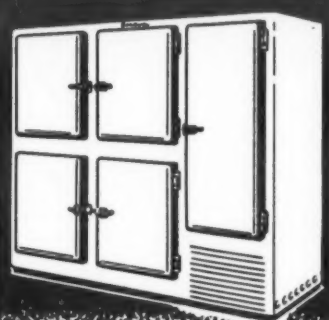
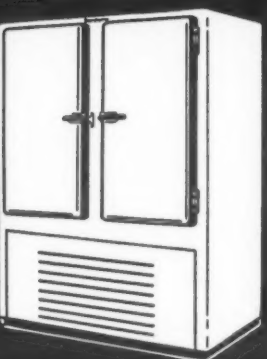
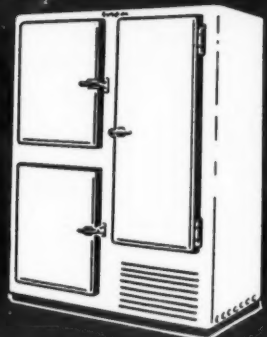
THE MOST COMPLETE AND
BEST PLANNED LINE IN
AMERICA TODAY!

- ★ Normal Temperatures.
- ★ Tu-Temperatures.
- ★ Ice-Makers ★ With Meat Hooks.
- ★ Remote or Self-contained.
- ★ 23 to 56 cu. ft. Capacity.
- ★ Variety of Models in each size.
- ★ All welded steel.
- ★ Exclusive "Climatic Food Conditioning" and other top choice engineering features.
- ★ And ALL MODELS READY FOR IMMEDIATE DELIVERY

Sell A Complete Matching Line!

MEAT CASES • FROZEN FOOD DISPLAY CASES
BEVERAGE COOLERS • BULK STORAGE FREEZERS
All Nationally Advertised

LET'S GO, MR. DEALER! The big, modern JORDON Plant can take care of your needs, too. Write, wire, phone.

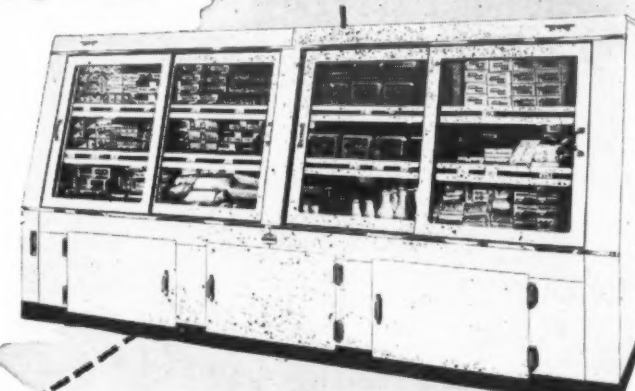


JORDON
AMERICA'S MODERN COMMERCIAL LINE
JORDON REFRIGERATOR CO.
Sales Division
235 N. BROAD STREET, PHILADELPHIA 7, PENNA.
PLANT, PHILA., PA. CABLE: "JORDONREF" LOCust 7-2913

SELF-SERVICE

with the Sherer Dairy Case

Sherer's Self-Serve Dairy Case offers
merchants efficiency and
dependability . . . triples
display area . . . generous
refrigerated storage space..
It boosts sales and profits
for them.



SHERER
COMMERCIAL REFRIGERATORS
SHERER-GILLET CO., Marshall, Michigan

VEGETAIRES • DAIRY CASES • REACH-IN

REFRIGERATORS • WALK-IN COOLING ROOMS •

MEAT & DELICATESSEN DISPLAY CASES •

One member of a complete quality line . . .
designed to be saleable in volume at a profit.

What's New (Cont.)



New Ventilator Changes Air 12 Times Per Hour

RACINE, Wis.—Three models of the new "Splendid-Aire" portable electric window ventilator, claimed to supply 12 complete air changes hourly for an average-size room, are now in production by Metal-Tex Corp. here, it is announced.

Made in sizes to fit windows 22 to 27 in., 24 to 31 in., and 27 to 36 in. wide, the exhaust-type ventilator is reported to require only four screws for installation in any window. Windows may be completely closed behind the unit, according to the manufacturer.

The "Splendid-Aire" is designed to remove stale air, odors, and smoke from homes and offices without creating objectionable air currents or noise.

Motor of the ventilator is described as "quiet and vibrationless, with semi-oilless bearings which require only three drops of machine oil twice yearly." It is a 110-volt, 60-cycle, a.c. type provided with an 11-ft. cord, switch, and rubber plug.

Finished in ivory enamel with chrome trimming and unconditionally guaranteed against material or workmanship deficiencies, the ventilators are now available for delivery. They are said to offer "all the desirable features of built-in ventilation at only a fraction of the cost."

Ice Cream Freezer Has Tekni-Craft Temp Control

BELOIT, Wis.—Featuring the new Tekni-Craft automatic temperature control, which is said to control temperature directly by temperature instead of by time, pressure, or other indirect means, the model 10FC Taylor ice cream freezer is now being produced by Tekni-Craft here.

The new model is a 2½ gal. freezer capable of making 18 to 24 gals. of ice cream per hour, according to Charlie Shaw, advertising and sales promotion manager.

The Tekni-Craft temperature control, he says, keeps frozen malted, frozen custard, or any other freezer fresh product always ready for instant serving direct from the freezer.

Advantages of the control are that it keeps the temperature constant, permits automatic batch freezing, speeds up draw-off, reduces power cost, prevents overfreezing, and makes it possible to operate three freezers from one compressor, he declares.

To accomplish the latter, he explains, the control will operate each freezer in turn, so that a unit of the size needed for one freezer can be used for three freezers.

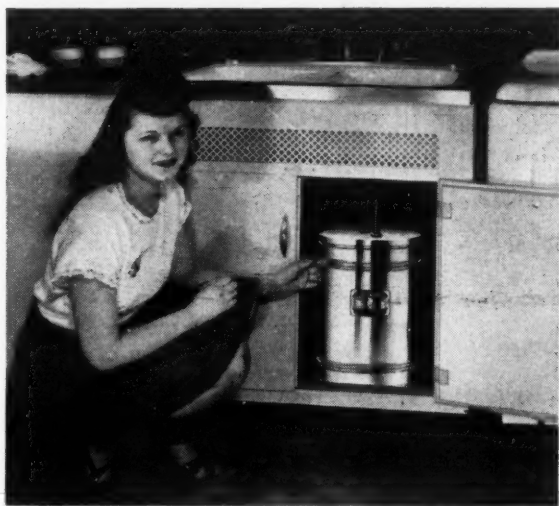
Because of this new temperature control, he continues, only three controls are needed for the Taylor freezer. One control permits the operator to select any desired temperature between 22 and 26° F. A second permits him to select manual or automatic operation. The third gives him a choice of five heater speeds.

"By setting one control for the desired temperature," Mr. Shaw explains, "and putting the other on 'automatic,' the operator can forget about ice-cream making after he has poured in his mix and flavors."

"In a few minutes he can draw off his ice-cream and every batch will have the same temperature."

\$50,000 Frozen Food Firm Opens

PERRY, Fla.—A new \$50,000 enterprise, the Taylor Country Frozen Food Co., has opened for business here. The owners are R. W. and J. R. Vereen.



Vacuum Can Introduces Electric Water Heater

CHICAGO — A small automatic electric water heater which can be plugged into any convenient 110 to 125 volt AC outlet is now being manufactured by the Vacuum Can Co. here.

Known as the AerVoid hot water heater, the appliance is made in 3, 5, and 7 gal. sizes. It consists, according to the manufacturer, of an inner stainless steel tank, rigidly supported, centered, and encased in an outer stainless steel shell with 2 in. of Vermiculite insulation between them at sides, top, and bottom.

The heating element is the two band type and consists of No. 24 AWG nichrome or equal wire, embedded between mica strips and protected by an outer shell of either No. 26 or 28 Armco, Aluminized steel, or

galvannealed steel sheets. The element is claimed to provide fast heating and reheating of the water.

Water temperatures are thermostatically controlled at 180° F., plus or minus 10° F., the manufacturer said. The junction box is designed for use with BX, conduit, or thinwall tubing, he added.

The tanks have been tested for water working pressures of between 250 and 350 lbs.

Height and diameter of the casing in the 3 gal. size are 16 in. and 10½ in. respectively. In the 5 gal. size these dimensions are 18 in. and 14 in. In the 7 gal. size, they are 24 in. and 14 in.

The 3 gal. heater is rated at 1,000 watts, while the larger sizes are rated at 1,200 watts, according to the manufacturer.

In addition to heaters using 110 or 125 volt AC current, units can be furnished to use 220 to 240 volts, AC, he added.

Shown at left is one of the Vacuum Can Co.'s small electric water heaters. Made in three sizes, the units have cold water inlet and hot water outlets of stainless steel. On the outside of the casing a relief valve is connected to the hot water outlet.

AIR CONDITIONING condensers and coolers FAST designed and built

We design, build, retube or rebuild quickly any unit with tubes, standard or special, for Freon, ammonia, CO₂. Materials on hand for prompt delivery. Emergency maintenance work 24 hours a day, anywhere.

Condenser Service & Engineering Co., Inc.
88 River Street, Hoboken, N. J.
Phone HO 3-4425. After 6 P. M. or Sundays, HO 3-4429



Up-to-the-minute discount sheets now available—Late 1946 catalog mailed on request.

Automatic HEATING & COOLING SUPPLY
DIVISION OF WEIL-MCLAIN COMPANY
647 W. Lake St., Chicago 6, Ill.
Branch—809 W. 74th St., Chicago, Ill.

A MASTERPIECE in Thirst-quenching Convenience

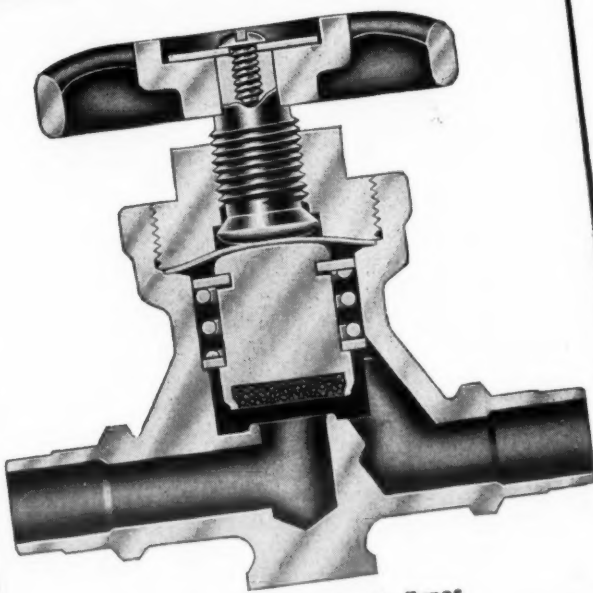
OASIS
ELECTRIC WATER COOLER

You're always Sure with an Oasis-built by EBCO, pioneers in the electric water cooler field.

The EBCO Mfg. Co.
401 W. Town St.
Columbus 18, Ohio



NEW Life-Time DIAPHRAGM PACKLESS VALVES

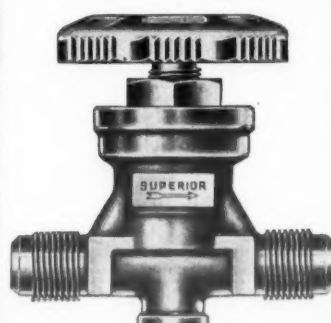


Line, Branch and Angle Types

10 FEATURES OF SUPERIORITY—Check them!

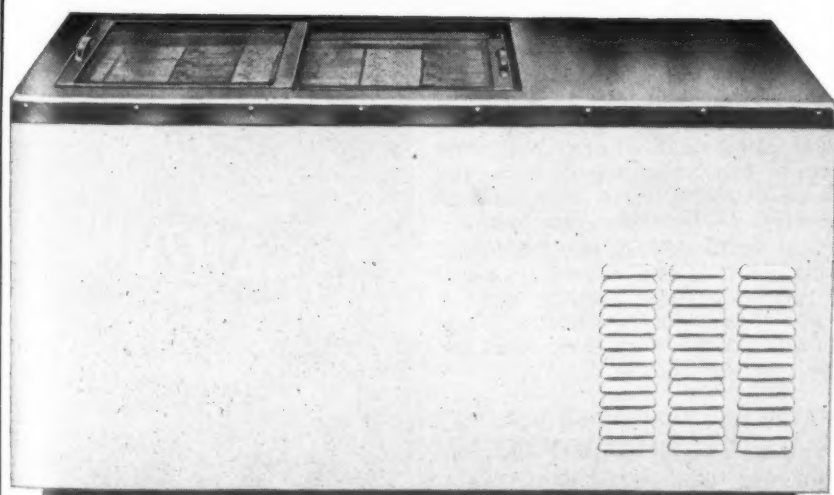
- 1—Rugged—pleasing appearance—symmetrical design.
- 2—Wrench pads for individually tightening flare connection.
- 3—Unique solder connections permit soft or silver soldering—without removing internal assembly.
- 4—One-piece, plated lower stem.
- 5—Controlled stem travel assures "Life-time" diaphragm performance.
- 6—Controlled seating results in "Life-time" operation.
- 7—Large bearing surfaces—polished stem heads, and scientific lubrication assure "Life-time" performance of upper stem and diaphragm.
- 8—Unrestricted flow—ease of operation.
- 9—Operates under normal pressure, with flow in opposite direction.
- 10—No special tools required for disassembly or reassembly.

Ask Your Jobber About "Life-time" Packless Valves
They're SUPERIOR!



Here it is!

The SENSATION of 1947



Model 510 A

Check these Features!

- 2 THERMOPANE SLIDING GLASS DOORS
- POLISHED STAINLESS STEEL TOP
- BUILT-IN 4 WALL REFRIGERATION
- ALL WELDED HEAVY GAUGE STEEL CONSTRUCTION
- HYDROLENEED FOR VAPOR SEAL

This 10 cubic foot all welded steel self service frozen food display cabinet is designed to meet the needs of the average store.

This self-contained, smartly styled, and superbly built cabinet eliminates the problems of:

- Lack of space
- Fear of overstocking
- Fear of investing too much

FLEISCHMAN FREEZER CO., Inc.

275 East 140th St., Bronx 51, N. Y.

Superior Valve and Fittings Co.

1509 WEST LIBERTY AVE., PITTSBURGH 26, PENNA.
OFFICES IN PRINCIPAL CITIES • STOCKS: CHICAGO (6) • LOS ANGELES (15) • JOBBERS EVERYWHERE

Herman Nelson Announces Branch Manager Changes

MOLINE, Ill.—Charles S. Stock, general sales manager of the Herman Nelson Corp. here, has announced several changes in the branch office personnel of the company.

Anthony Spoodis, for 16 years manager of the Moline branch, has been named manager of the Minneapolis branch office. Associated with him will be Carl H. Johnson, Jr.

Frank Tyler, who was recently in charge of the sales training program at the home office, has been named manager of the Moline branch.

The St. Louis branch sales office will be managed by Harol C. Gerboth.

Westinghouse Output Hits New Peacetime Level

PITTSBURGH — Westinghouse Electric Corp.'s production in the first quarter, ending March 31, 1947, set a peacetime record of \$140,121,973. This total of net sales billed compares with \$128,772,896 in the last quarter of 1946.

Net income for the first three months of this year amounted to \$11,060,195, equal to a return of 7.9% on sales billed.

Unfilled orders as of March 31 were \$642,090,960, highest in the peacetime history of the company. New orders booked in the first three months of this year amounted to \$201,021,891, a slight decrease from the peacetime record of \$215,277,581.

Refrigeration Problems And Their Solution

By P. B. Reed

For Service and Installation Engineers



Manager, Refrigeration and Air Conditioning Division, Perfex Corp.

Temperature Difference (Concl.)

(Another 'Mystery' Story)

Editors Note: Last week's article described the thinking and calculations by which a man selected a 1/2-hp. condensing unit for a frozen food chest. This week's instalment explains why the selection didn't work out correctly.

MACHINE RUNS MOST OF THE TIME

The owner's wife told him a couple of days after he had started it up, "That freezer thing runs all the time. At least it is running almost every time I go to the basement, and I hear it running most of the time I am in the kitchen."

"That's just because it's new, and you notice it. I don't believe it is running much over half the time," he replied.

PUTS MORE FOOD INTO THE CABINET

During the next few days he kept loading the cabinet with more foods, almost all of which were pre-frozen, including a quarter of beef, and other meats from a friend who had a large freezer room.

Again the wife, "I tell you that freezer runs almost all the time."

"How much is 'all the time'?" "I've only caught it not running a couple of times, and it wasn't off long then."

CONSULTS A SERVICE ENGINEER

So the husband begins to notice it. It seems to be running about all the

time all right. So he begins to wonder what is wrong. Finally he went to an independent refrigeration service engineer that he knows and told him the story. The service engineer told him he would take a look at it.

He does so the next day. He checks it all over. Nothing wrong; charge, valves, everything O.K. He put a recording pressure gauge on it and comes back that evening when the owner is at home.

The recording pressure gauge shows long running cycles with an occasional off cycle of 15 or 20 minutes. It also shows a rather quick pull-down at the start, from 13 to 5 lbs. and a long pull-down from 5 to 2, thus averaging about 3 1/2 p.s.i.

CONDENSING UNIT TOO SMALL

Said the service engineer, "Well, you just haven't got enough machine. I thought when I first saw it, that a 'third' was pretty small for that big a freezer."

"I figured it pretty carefully," said the owner, "about 1,200 B.t.u. per hour heat leakage and the machine has 2,000."

"Let's see your figures." So they looked over his calculations. Everything seemed all right until they got down to estimating the heat leakage.

Said the service engineer, "Let's see. You based this on 75° temperature difference on the two sides of the cabinet wall. That is 75° outside and 0° inside."

"Sure," said the owner.

"Yes, but the evaporator has got to be a lot colder than 0° if the cabinet temperature is going to be 0°. There has to be a temperature difference between the cabinet air and the evaporator; hardly ever less than 10° sometimes a lot more depending on how much active evaporator surface there is.

"You've got a good liner and coil there so your temperature difference should be fairly low. Let's see, the average suction pressure is about 3 1/2 p.s.i. That's about -12° F.

MORE HEAT LEAKAGE THAN HE FIGURED

"So your temperature difference isn't from 75° to 0°. It is from 75° to -12° for the cold -12° evaporator is right up against the inside wall of the cabinet. That makes the temperature difference 87° instead of 75°, an addition of 12° or about one-sixth. So your heat leakage goes up about one-sixth or 200 B.t.u. per hour.

"As a result you have a 1,400 B.t.u. per hour heat leakage instead of 1,200. Probabilities are that your average hourly total load is maybe 100 or 200 B.t.u. more, or a total of say around 1,500 B.t.u. per hour."

"I never thought of that," said the owner, "but I should still have 500 or 600 B.t.u. over 1,500 B.t.u. per hour. The machine shouldn't run more than about three-fourths of the time."

MACHINE CHOSEN AT WRONG SUCTION TEMPERATURE

"Oh, no," replied the service engineer, "there's something else you forgot. At least, I imagine you did. If you forgot about the evaporator being 10 or 15° below the cabinet temperature, you probably selected the machine for a 0° evaporator instead of the -12° at which the evaporator really is."

"By golly, you're right. I did. That would make a little difference, wouldn't it?"

HEAT TRANSFER EQUIPMENT

MARLO
COIL COMPANY
SAINT LOUIS, MISSOURI

"It would make more than a little. A condensing unit loses capacity pretty fast down there at that temperature as the evaporator temperature and suction pressure go down. I don't have any figures with me but that unit, although it has around 2,100 B.t.u. per hour capacity at 0°, would have very little, if any, over 1,500 B.t.u. per hour at -12°."

"And the running time as recorded on the chart bears it out. The capacity per hour of that unit at -12° just about balances the load so the machine runs all the time."

NEEDS A 1/2 HP. UNIT

"Looks like you're right," admitted the owner. "What do I do? Get a half-horse unit?"

"That's about all you can do. You could speed your unit up some maybe, but not as much as 1/2 more, or about that, which is what you would have to have in order to give you about 1/2 or 1/3 idle time."

"At -12° evaporator a 1/2-hp. low-temperature machine would have a capacity of about what your 1/2 would give you at 0°, that is, about 2,100 or 2,200 B.t.u. per hour—just what you need."

Schmitz Is Sales Manager For Servel In Northwest

EVANSVILLE, Ind.—A. M. "Al" Schmitz, eastern field engineer for Servel, Inc.'s Electric Refrigeration Division, has been named manager of the northeast district, reports W. J. Aulsebrook, division sales manager.

As the new manager, Mr. Schmitz will have charge of all New England, as well as up-state New

York. He has been eastern field engineer for Servel since 1935, an appointment he received after serving as field engineer throughout Servel's various district areas. Mr. Schmitz has been associated with the company since 1926. He and his family live in Albany, N. Y.

Both in the same bracket!

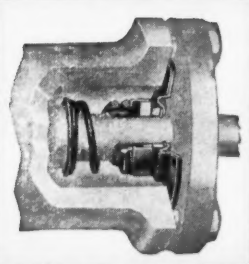
THAWZONE
PATENTED
The PIONEER FLUID DEHYDRANT

... ACTIVE, ALWAYS CIRCULATING. DESTROYS MOISTURE CHEMICALLY, ECONOMICALLY, QUICKLY AND EFFECTIVELY.

TRACE
REFRIGERANT LEAK DETECTOR

... ITS STABLE AND VIVID RED COLOR REVEALS LEAKS INSTANTLY!

HIGHSIDE CHEMICALS CO.
195 VERONA AVE. NEWARK 4, N. J.



ROTARY SEAL REPLACEMENT UNITS for Refrigerator Compressors

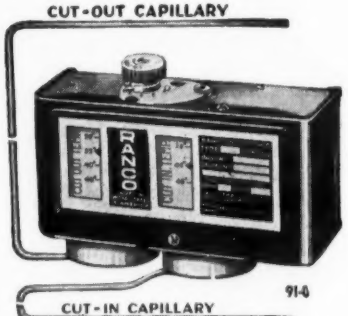
- SIMPLE IN CONSTRUCTION
- SIMPLE IN INSTALLATION
- SIMPLE IN OPERATION

Available for Over 752 Models of Refrigerating Assemblies.



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Canadian Office: 382 Victoria Ave., Montreal 6, Canada

RUGGED RANCO REFRIGERATION CONTROLS CAN "TAKE IT" YEAR AFTER YEAR



Type 91-O Two-temperature Control

Ranco Refrigeration Controls, commercial and household replacement types, are tough. Each part is heavier, stronger, with more capacity, than it would be necessary to use in an ordinary control.

Ranco stays accurate, lasts longer—because—Ranco Controls are better built!

See Your Jobber and write for Bulletin 1042 on Commercial Type "O" Controls

Ranco Inc.

COLUMBUS 1, OHIO

IT'S MORE THAN JUST ANOTHER REFRIGERATION PLATE

In thousands of freezer cabinets, frozen food locker plants, sharp freeze shelf stacks and similar equipment all over the country Hubbell-Yoder Refrigeration Plates are doing the job better than it has ever been done before, and at a lower cost. They have established a new and vastly higher standard of operating efficiency and economy for

low temperature refrigeration. They have set up a new mark for all other freezing units to shoot at. That briefly, is what the Hubbell-Yoder system of Complete Surface Freezing means when the chips are down. Would you like to know how it can be adapted to your requirements? Write, wire or phone.



ENGINEERING SERVICE, INC.
1311 WEST 80th STREET • CLEVELAND, OHIO

Bank Becomes Appliance Dealer's 'Branch'



Before or after transacting their business at the bank, customers may view the appliances displayed by the Ulan & Co. appliance store. The bank gets its interest on the long-term sales, the Ulan Company gets its added sales.

More Than Dozen Orders In First Week Prove Value of Bank's Cooperation

RIDGEWOOD, N. J.—When appliances are actually sold in a bank it might indicate that the money business is slow. It might also indicate that someone has come up with an entirely new sales idea.

The Ridgewood branch of the Manufacturers Trust Co. is doing just this—allowing appliances to be sold there. Although a local appliance dealer is doing the actual selling, the bank is cooperating.

On display in one corner of the large bank lobby at 55-60 Myrtle Ave. is a Laundral automatic washer, Kelvinator refrigerator, console model Crosley combination radio-phonograph, and Maytag washer.

Sees Need for Branch

It all started about eight months ago when Sam Ulanoff who owns the appliance store called Ulan & Co. in Ridgewood, decided that perhaps he could get some benefit out of the large amount of time sales business he had been giving Manufacturers Trust.

"With new appliances becoming available," Mr. Ulanoff explains, "my business prospects appeared to warrant opening a branch store or at least another sales office. It occurred to me that if I could set up a regular display showing postwar appliances in the leading Ridgewood bank, the Manufacturers Trust, and have a man taking orders there, I could benefit both myself and the bank."

Approaches Bank

Realizing the radical nature of such a scheme to the conservative banker's mind, Mr. Ulanoff broached the matter gently with the manager of consumer credit. He pointed out that this great yearly time sales business going to the one bank probably constituted their greatest amount of "paper" business from one source. With the bank's cooperation, he told him, this could be increased considerably and the fact that they handle "paper" could be publicized.

"I particularly emphasized the fact that by presenting only the newest and most modern items," Mr. Ulanoff

explained, "good will could be built up between the bank and the local citizenry."

"It took months till I managed to obtain full authorization. This finally came directly from the company's board of directors. Even now, extreme conservatives of the bank are not convinced that my display is entirely in order with the decorum usually expected of a bank."

Dozen Orders In Week

Although Mr. Ulanoff or one of his salesmen is usually in attendance to speak with interested parties, a bank employee sometimes does the honors when the occasion arises and no representative of Ulan & Co. is present.

"The project's feasibility," Mr. Ulanoff says, "is indicated by the first week's results. More than a dozen orders were taken because of the display at the bank. Cards and pamphlets on the display bearing our name send many new customers to the store. It's just like having a regular branch office."

American Ironing Machine Co. Merges with Barlow & Seelig

CHICAGO — American Ironing Machine Co. has been merged into Barlow & Seelig Mfg. Co. as a result of action taken by the stockholders of Barlow & Seelig.

It was reported that Barlow & Seelig was in possession of 81.64% of the American common stock.

BRAND NEW
UNIVERSAL REFRIGERATION
CONDENSING UNITS
LIMITED QUANTITIES
1/2 H. P. Compressors with Motors
1/3 H. P. Compressors with Motors
MONARCH
5200 Euclid Ave. HE 9090
Cleveland 3, Ohio

Apex Appliance Output For March Hits 48,885 Units, Frantz Reports

CLEVELAND—The Apex Electrical Mfg. Co. set a new production record of 48,885 vacuum cleaners, washers, and ironers during the month of March, reports C. G. Frantz, president.

A new high also was reached during the first quarter of this year with appliance production totalling 131,389 units.

Mr. Frantz said that the new records were made in spite of the fact that the company lost 10% of its operating time during the quarter because of plant shutdowns which were caused by curtailment of industrial gas supply.

G-E Los Angeles Branch Moves To West Jefferson Location

LOS ANGELES—General Electric Appliances, Inc. of Los Angeles recently moved to its new branch headquarters at 150 West Jefferson, according to an announcement by Stephen B. Maher, manager.

Previous to its removal to its new location, the distributorship held a showing for its dealers of all General Electric products—the first such showing since before the war—at the Ambassador Hotel Theater here. Geo. A. Lloyd, sales manager of the branch, was assisted in the presentation of the show by factory product specialists.

Speed-Freeze

AN OUTSTANDING
FROZEN FOOD
CABINET...

PROVEN BY PERFORMANCE!



20 cubic feet, self contained model

The recognized superiority of all IDEAL "Speed-Freeze" products has created nation-wide confidence and distributor preference for this outstanding frozen food cabinet.

For Speed-Freeze cabinets are designed, engineered and built to render many years of extraordinary

service, to insure maximum operating efficiency.

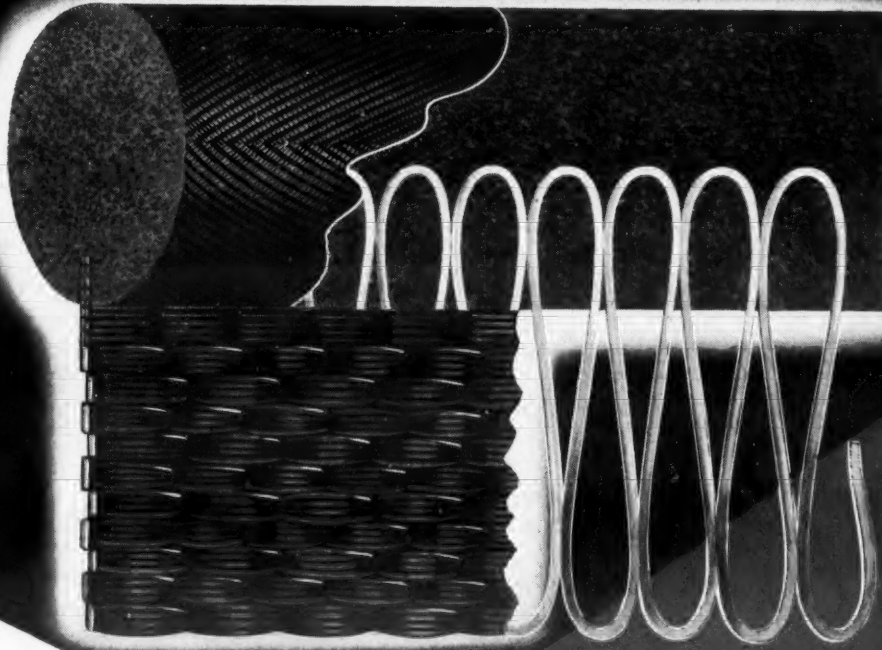
Manufactured to the highest standards, the Speed-Freeze line is RIGHT in quality, RIGHT in price... and approaches the fastest cooling known in the art of refrigeration. For additional information, write us today.

Proven by
Performance

IDEAL
Speed-Freeze
PRODUCTS

IDEAL COOLER CORP. 2953 EASTON AVE. ST. LOUIS 6, MO.

FOR EASY SPECIFICATION



INNER-SEAL

the all-purpose weatherstripping

It's stronger, more flexible, makes better seals... comes in standardized sizes for easy specification

Woven wire makes it stronger. Live sponge rubber seals it tighter.

Those are the simple facts that have sold INNER-SEAL to builders of refrigerators and refrigerated carriers... to steamship lines... airlines... bus and truck manufacturers... to hundreds of companies with a sealing and weatherstripping problem.

It's a story we'd like to tell you with samples and performance data. Write to us if interested.



fresh...
pure...
re-circulated...
filtered... air

- This power-driven ventilator gives clean, pure, filtered air... all the time.
- Equipped with 1/15 H.P. Holtzer-Cabot capacitor-run motor with speed control; Torrington twin-blower wheels and Owens-Corning Dustop filter.
- Handles 600 CFM fresh outside air or 250 CFM recirculated air. When desired, room air can be mixed with fresh outside air by means of the slide damper.
- Only 4 inches inside the room.

DEALERS: Write for Territories Still Available!

LANGTOT INCORPORATED
32 EAST 4th STREET • NEW YORK 3, N.Y.

BRIDGEPORT FABRICS, INC.

BRIDGEPORT 1, CONNECTICUT

Our One Hundred and Tenth Year

Export Preference Aid To Be Granted By CPA Described In New Directive

Regulation Explains When, How Orders Will Be Approved

WASHINGTON, D. C. — What limited export preference assistance the Civilian Production Administration now will grant is described in a new regulation recently issued by the agency.

The directive, Allocations Regulation 2, also sets forth in detail the circumstances and manner in which this assistance will be extended.

"In general," CPA reported, "issuance of authorizations to place certified orders will be limited to expediting purchase in this country of minimum quantities of scarce materials required to expand foreign sources of supplies badly needed in the United States, and to cases where the assistance is required to meet international commitments."

WHERE APPLICATIONS GO

"Before granting assistance in these latter cases, CPA must receive a recommendation for approval from the Secretaries of State and Commerce."

The agency said applications for CPA export preference certificates, for all destinations except Canada, will be addressed to the Office of International Trade, Department of Commerce. Applications for certificates to cover Canadian deliveries will go directly to CPA.

It is stipulated in the regulation that the certificate on a certified order is equal in precedence to an

RR (or CC) preference rating assigned by CPA prior to April 1, or subsequently by the Housing Expediter, according to the agency. In general, it said, suppliers are required to accept and fill certified orders, giving them precedence over existing contracts and orders.

WHAT DIRECTIONS EXPLAIN

"Direction 1 to AR-2 explains how exporters who have been authorized by the Office of International Trade to use the symbol CXS on purchase orders for limited quantities of tinplate, should furnish that information to steel producers," CPA explained.

"It provides also that such orders are to be treated as certified export orders and that CPA may establish space reservations on steel producers' schedules for the benefit of these orders."

"Direction 2 to AR-2 establishes special rules for placing, accepting, and scheduling certified orders for steel, copper, and aluminum. These rules provide lead time, between the placing of orders and their production, and provide that a producer of steel, copper, or aluminum . . . need not accept a certified order which is received less than 30 days (45 days in the case of tinplate) prior to the first day of the month in which shipment is requested, unless specifically directed to do so by CPA."

'Missing Boat' In S.A., Business Men Warned; Delivery, Prices Cited

OMAHA, Neb. — Al V. Sorensen, head of the Midwest Equipment Co., Omaha, and president of the Nebraska-Iowa Electrical Council, is on a 41-day air tour of Central and South America, during which he will contact heads of electrical firms, plug Omaha products in general, and visit representatives of the Baker Ice Machine Co. of Omaha.

J. Gordon Roberts, president of the Roberts Dairy Co. of Lincoln and Omaha, who is Mr. Sorensen's traveling companion on the good will trade tour, has written back from Guatemala City that American business men are "missing the boat" in South America, due to delay in filling orders and rising prices. He cited the case of a Guatemala City creamery owner who told the Omahans that he canceled an order for a refrigeration machine when he learned the price had risen 60% and that delivery would be delayed a year.

Refrigerators, Washers Remain Under Customs Check In Brazil

RIO DE JANEIRO, Brazil — Refrigerators and washing machines still are subject to Brazilian customs clearance licenses, it was announced recently by the Federal Foreign Trade Council of Brazil. All but these and 18 other products have been liberated from that control.



Foreign Trade Opens New Frontiers But Don't Exploit Them—Stelpflug

Says U.S. Must Export Know-How Along With Surpluses

CHICAGO — Export provides not only new frontiers for United States' surplus wealth, productive capacity, and know-how but a means of eventually building a better world "in which all of the people can live without the constant threat of war," according to W. J. Stelpflug, vice president of Hussmann Ligonier Co.

But, Mr. Stelpflug warned the recent annual meeting here of the Refrigeration Equipment Manufacturers Association, "we must not export for the purpose of exploitation."

"To me, intelligent exporting means more than the selling of our surpluses," he said.

"It means that we must export know-how along with many materials and surpluses to help other nations to achieve a means of improving their own standards of average wealth through an improvement in their own productive facilities so that in the final analysis they may not only buy more from us, but that they may also ship more to us and to other nations so as to improve the standards of living throughout the world."

EXPORTERS HAVE EXPLOITED

"You may point out the fact that other nations have exported for many generations without having achieved, to any great extent, the object which I have stated as being desirable. It is my opinion that many of the major exporting nations of the world have exported largely for exploitation."

"When they have exported money and productive equipment, it has always been used for the benefit of the exporting nation and seldom to improve the standard of living or the general economic conditions within the country wherein enterprises have been set up. It is my belief that this sort of thinking is largely responsible for the position in which England finds itself today."

"In the United States we have, generally speaking, been taught to think in terms of setting up industries for the purpose of improving the average standard of living. It is our nature, by training, to want to achieve always a higher rate of production and distribution."

"It is difficult for me to believe that if our leading industrialists move into the export market, as they have moved from time to time into new sections of this country, that they will think or act differently than they did within our own country."

"You may point out that nations which have exported for the purpose of exploitation have never been attacked by the nations exported to because they have never permitted these nations to grow strong enough to make an attack. We, on the other hand, played an important part in making Japan an industrial nation and were attacked by them."

MUST CURB POWER LUST

"I do not discount the selfishness of individuals or nations. I am not such an idealist that I believe we can ever eliminate the lust for power."

"It can be said that industry in the United States has operated somewhat on the basis which I am suggesting for world-wide planning in that it has shared with labor. Unfortunately, it is true that much of this sharing was forced. It is further true that labor . . . acquired too much power and, in turn, has abused this power."

"On the other hand, the overall effect has been that our nation has continually moved ahead to a wide distribution of average wealth and a high standard of living for the average person. In achieving our high standards it has become increasingly clear that there will

always be need for proper control of balances of power to offset the inherent individual and group selfish attitudes of human beings."

"This will be equally true with reference to the relations between nations of the world, but if we have made our system work reasonably well between our individuals and states, there is no reason why, in time, with the use of common sense controls, we cannot eventually achieve some of these same benefits on a world-wide basis."

Earlier in his talk on "Why I Am Interested in Export," Mr. Stelpflug stressed the importance of eliminating trade and travel restrictions. These restrictions, he declared, cause the pressure which in turn causes great wars.

MUST CONTROL WAR CAUSES

"Some may refute this and show them to be caused by the ambitions for power of a Hitler or the War Lords of a Japan, but I believe that such centralized power arises only from an economically dissatisfied mass of people and that the basic pressures which cause great wars can be relieved at some time in the future through intelligently applied export and immigration restrictions," he asserted.

"If we of the United States do not do our part to control the basic causes of war we will one day run up against a nation, or combination of nations, who will take from us by force the sources of our wealth. I am interested in export because I think such commerce can be used to control the forces which might otherwise take our wealth from us."

Mr. Stelpflug acknowledged that world-wide travel and trade barriers "cannot be eliminated at one stroke."

"The job can only be done over a long period of time," he said, "but will be done only if enough enlightened people in our country share in the responsibility for trying to solve the problems of export and import in an orderly and constructive way."

He asserted that "there can be no surpluses for at least a thousand years" if these barriers are removed.

It was the lack of such barriers between our states that was partly responsible for our prosperity, Mr. Stelpflug said. To further illustrate the effect of barriers, he contrasted the standard of living and distribution of wealth in Canada with those in Mexico.

ISOLATIONISM OUT

"It is my opinion," he concluded, "that the high standards of Canada result from the fact that we have treated it much more like one of our own states than we did Mexico. We have barriers between Canada and the United States, but not sufficient to prevent a free flow of money, goods, technical know-how and culture."

"Our nation has never been truly export-conscious," Mr. Stelpflug pointed out. "We have had no need for being. We have gotten along pretty well with an isolationist policy."

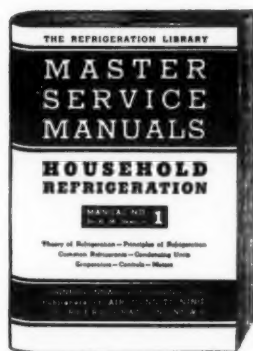
"The new United States foreign policy, as recently announced by President Truman, makes it clear that we can no longer live as isolationists. Whether we like it or not we have stated our intention to extend our sphere of protection of people who want to be politically free beyond those under the Monroe Doctrine to those anywhere in this world."

"This means we must know and understand all such people. I believe we can best accomplish this by doing business with them and so I am interested in export as a means for getting acquainted with our new responsibilities."

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GRUNOW

MANUAL NO. 5—Grunow household refrigerator service methods, for all float valve and Carrene Meter models. The vacuum cycle of operation. Step by step procedure for removing and replacing all parts and for all other service operations. Chapters: (1) Refrigerant and cycle of operation; (2) head pressure checking, leak detection, and purging; (3) Carrene meter and checking charge; (4) removing and replacing unit parts; (5) thermostats and electrical equipment, testing capacitors, transformers, and relays; (6) service problems and remedies; and (7) key specifications of 1933-37 models useful in replacing parts. 68 pages. Price \$1.00.

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OFF THE CHEST

INEXPERIENCED FREEZER FIRMS WILL DROP OUT

Farm & Home Freezer Mfrs. Association
1706 — L St., Northwest
Washington 6, D. C.
April 9, 1947

Editor:

When I first read your editorial in the issue of March 31, I was quite alarmed, but after thinking the matter over further, it seems to me, that the situation as described by you is nothing more than can be expected.

This is comparatively a new industry and it has been publicized so extensively through the press and trade papers, that literally hundreds of manufacturers, some of whom were wholly inexperienced in refrigeration rushed into the business, thinking it was a chance to make easy money.

We who have been long in this business rather expected this and yet there was nothing we could do about it, as this is a free country.

There are a lot of imperfect and poorly made cabinets on the market, but this is nothing new or startling. When electric refrigeration was born scores of companies undertook to make refrigerators, who knew nothing about the intricacies involved and as a result the public got a lot of refrigerators that were of little or no account.

The first year air conditioning appeared on the market, 182 companies started to manufacture, most of whom knew nothing about the problems of air conditioning and in due course faded out of the picture, and this is just what will happen in the freezer business.

Companies such as we have banded together in our Association are experienced in refrigeration. Some have been making freezers for nearly 10 years and will continue to make them.

I have maintained from the start that the market for freezers is not

and never will be in the millions a year.

I am always glad to read your editorials, as I know that they are the result of clear thinking, and it might not be amiss to tell the public that there are a lot of good freezers being manufactured by responsible companies, and they should choose their source of supply rather than resort to blind buying.

E. G. VAIL,
Executive Secretary

KEEP UP THE 'CRUSADE'

720 Yale Ave.
Fresno, Calif.

Editor:

For some time I have been a subscriber and reader of your excellent publication. With a great deal of interest I have followed your "crusade" in the interests of better labor relations and controls.

I have come to the conclusion that you are a straight-forward writer and for that reason the editorials and Inside Dope columns are always read.

I am heartily in favor of getting off such fine democratic ideas to at least one class as you get off to the refrigeration trade; and I hope you keep it up as long as it is so urgently needed as it is today.

PAUL SHIRK

WHY NOT USE HEAT PUMP WITH 2 WATER WELLS?

Grimes Engineering
214 Shotwell Park
Syracuse 6, N. Y.

April 15, 1947

Editor:

First I want to congratulate you on your editorials. I enjoy reading everyone of them and I wish that millions of our people could read and understand them.

The heat pump promoted on page one, April 14 issue, is bound to come in for more and more use as time passes.

I do not know the method used by Mr. A. C. Crandall, when he speaks of the ground presumably adjacent to the house.

My question to you is this:

Why not drill two water wells on the lot as far apart as possible, probably 100 ft. in most cases? Install a small motor and pump to pump the water up from one well and through the condenser then right into the ground again. A reverse water flow might clean the screens. The water could spread out and mix underground the whole year around to provide you with chill in summer and with heat in winter.

The local well driller would know about the water conditions, so little risk would be taken.

I can't see much heat or chill in dry earth.

CHARLES P. GRIMES

STEEL WORKER URGES WAGNER ACT REVISION

524 Polk St.
Gary, Ind.

Editor:

The other day I happened to run across a reprint of one of your editorials entitled: "What's the Matter with America?" I am not a refrigerator man nor a capitalist. Have always been a steel worker and worked among C.I.O. members and think very little of them. They are a menace to production and good citizenship.

Also noticed the line "Out with special privileges. Revise the Wagner Act." Why not have a rubber stamp made of this line and stamp every letter sent out by business firms? Everyone receiving a letter with this stamp on it would surely take notice. It would cost not more than \$1 for a stamp and it would help let people know what business thinks of "disorganized" labor.

"Out with special privileges. Revise the Wagner Act. Bring back free speech."

H. A. ROGERS

P.S. Am going to have a stamp like the above made for my personal use.

WRITER GLEANED DATA ON VET OPPORTUNITIES

V. C. Kylberg, Contr. Engr.
66 Maple Ave.
Maplewood, N. J.
March 29, 1947

Editor:

Many thanks to you and your associates for their courtesy and valued cooperation in having given on pages 16, 17, and 18, in the March 17, 1947 number of AIR CONDITIONING & REFRIGERATION NEWS, such a "comprehensive and well balanced review" of the manual, which is officially known as "Establishing and Operating an Air Conditioning and Refrigeration Business," Industrial Small Business Series No. 59, U. S. Dept. of Commerce.

It is such valued cooperation of this character, which I have endeavored to get the several Governmental Agencies with which I have been associated during the late war, to recognize the efficacy and value of 'trade publications' in their endeavors to work with industry in the furtherance of industries' objectives rather than attempting to use their own bureaucratic methods in furthering their own ends.

While there are many Government publications that are sent out gratis, and for some there is a nominal charge, people in industry don't pay out good money for trade and other publications unless they are fully convinced that such publications are "worthwhile" and most essential for them to have, in order to keep posted on the latest developments, activities, and trends of the industry with which they are concerned. Ample evidence of the high regard and confidence which the "air conditioning and refrigeration industry" have in your publication, AIR CONDITIONING & REFRIGERATION NEWS, is clearly demonstrated by your phenomenal growth during the last decade among those who are active within the industry or are contemplating going into some phase of that industry or its affiliates.

You will be interested in knowing, that during the past year, when traveling through the country, interviewing and conferring with manufacturers, distributors, and dealers of "air conditioning and refrigeration equipment" as well as application engineers and other such potential users of this form of equipment, in order to get their opinions on the present status of the industry and its future trends, quite often the person being interviewed would refer to some recently published article in AIR CONDITIONING & REFRIGERATION NEWS to substantiate their views and/or opinions.

My purpose in interviewing and conferring with these people was to ascertain such opportunities as were to be found within the industry where the "Veterans" could become, either "gainfully employed" or go into business for themselves with due consideration to the veterans' inherent ability, know-how, and resources or willingness to acquire such under competent guidance and instruction.

You have done much in your "review" to bring out the objectives of the writer in the preparation of this manual for the veterans who are desirous of entering some phase of the air conditioning and refrigeration industry, for which I am very appreciative.

Evidently you rendered the ultimate consumer of domestic electric refrigeration a much valued service by publishing in your March 3, 1947, issue on page 10, a review of the U. S. Dept. of Agriculture Bureau of Human Nutrition and Home Economics manual on "How to Choose and Use Your Refrigerator." This should go far in maintaining a high standard of quality among the makers of such equipment and as such will be of considerable protection to the housewife or ultimate consumer.

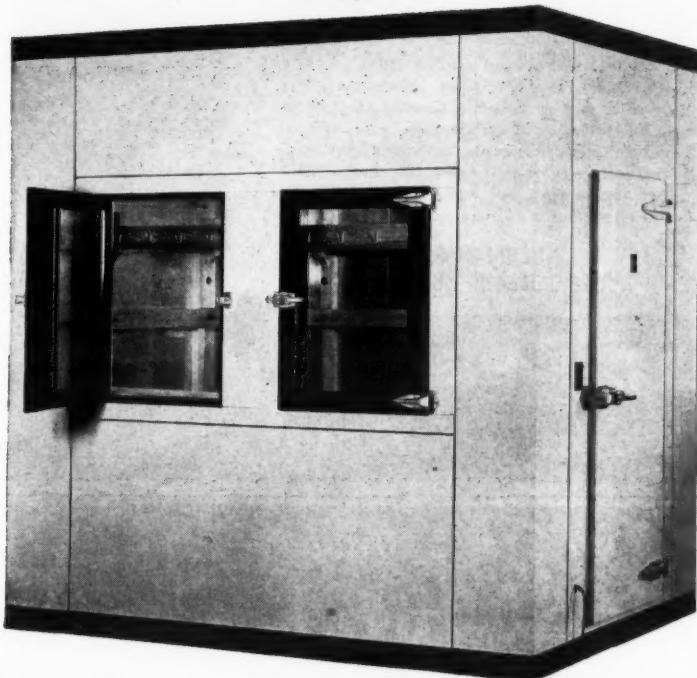
You will be interested in knowing that quite a number of bankers who have the manuals which I prepared, consider that the appendix E, "Ratio of Store Occupancy to Population," is one of the most valuable features in that it serves as a guide to them in determining the number of business establishments of a certain kind which their community can reasonably stand. Sometime if you have the space available it might be well to reproduce this table "E."

With kindest regards to you and your associates as well as with best wishes for the continued growth, influence, and prosperity of AIR CONDITIONING & REFRIGERATION NEWS.

V. C. KYLBURG

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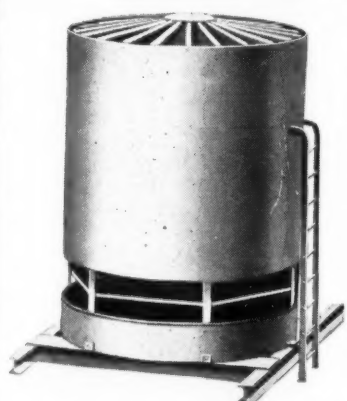
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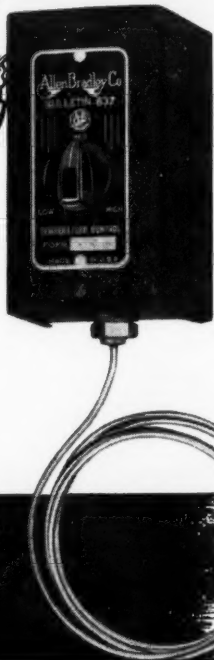
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GREENSBORO, N. C. for illustrated catalog and price list.

Duke Power Co. Promotes Merritt As Watkins Quits

CHARLOTTE, N. C.—H. A. Merritt has recently been appointed commercial manager of the Charlotte branch of the Duke Power Co. here. Mr. Merritt succeeds R. H. Watkins, who resigned to become director of the heating equipment division of Chapman & Wilhelm, appliance distributor.

Mr. Merritt has been with the Duke Power Co. since 1937.

Deepfreeze Names Hand N. Y. District Sales Manager

NORTH CHICAGO—Roland R. Hand has just been appointed New York district sales manager for Deepfreeze, announces F. F. Duggan, general sales manager of the Deepfreeze division of Motor Products Corp.

Experienced in appliance sales, Mr. Hand was affiliated with an electrical distributing organization for 17 years.

Liquid Carbonic Corp. Appoints Kinney Distribution Manager

CHICAGO—Lee W. Kinney, formerly associated with the White Motor Co., has been appointed distribution manager for the Liquid Carbonic Corp. here, the company has announced.

He succeeds Frank B. Andrews, who was recently appointed production manager of Liquid's bottlers' machinery division.

Servicing Truck Refrigeration Units

Editor's Note: Trucks using hold-over plates do not mount a condensing unit, but there are installations with the unit mounted in the truck. Some are driven by gasoline engines, while others are electrically powered, connecting to the power supply with extension cords, points out Kold-Hold Mfg. Co.

Instalment No. 31

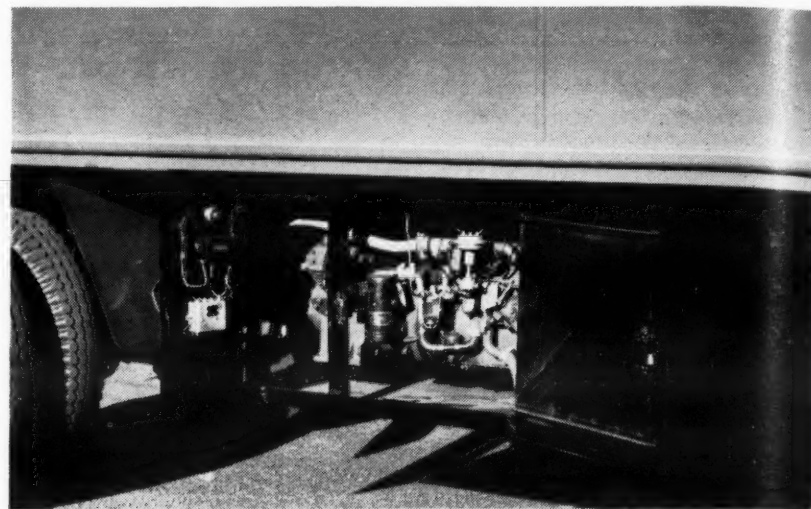


Fig. 8—Here is an under-body installation of a gas engine-driven unit connected to eutectic plates in a large trailer.

Where to Mount Condensing Units

As stated previously, trucks using hold-over plates often mount a condensing unit. The condensing unit position in the truck is unimportant, as far as operation of the refrigerating system is concerned. It may be located in the cab, above the cab, under the body (Fig. 8) or in one corner of the truck body (Fig. 9).

It should be mounted in a compartment, however, which will protect the unit from road splash and

damage while the truck is in transit. Free air circulation must be provided for the condensing unit when it is operating. This can be accomplished by leaving the doors of the compartment open when the unit is running at the plant.

At least 2 in. clearance between the condenser coil and the wall of the compartment should also be provided to insure good air circulation. If the unit is driven by a gasoline engine or other means while the truck is in transit, good air circulation can be provided by properly louvered doors.



Fig. 9—An electrically driven unit is mounted in one corner of this ice cream truck. Through an extension cord connection, the unit operates to freeze the plates while the truck stands idle overnight.

Electrical Connections

The extension cord for electric driven units should be of the 3-wire type with one wire acting as a ground for the condensing unit frame. The cord should not exceed 30 ft. in length and should be of the size shown in Table 1. If cords longer than 30 ft. must be used, they should be of the next larger wire size than listed in the table.

Large size condensing units are supplied with a starting switch, overload cutout, or both, and these should be used. On smaller condensing units mounted in the truck body, it is suggested that a small, fused, double-pole single-throw combination switch and outlet box be installed in the condensing unit compartment. This provides a convenient method of connecting and fusing the circuit.

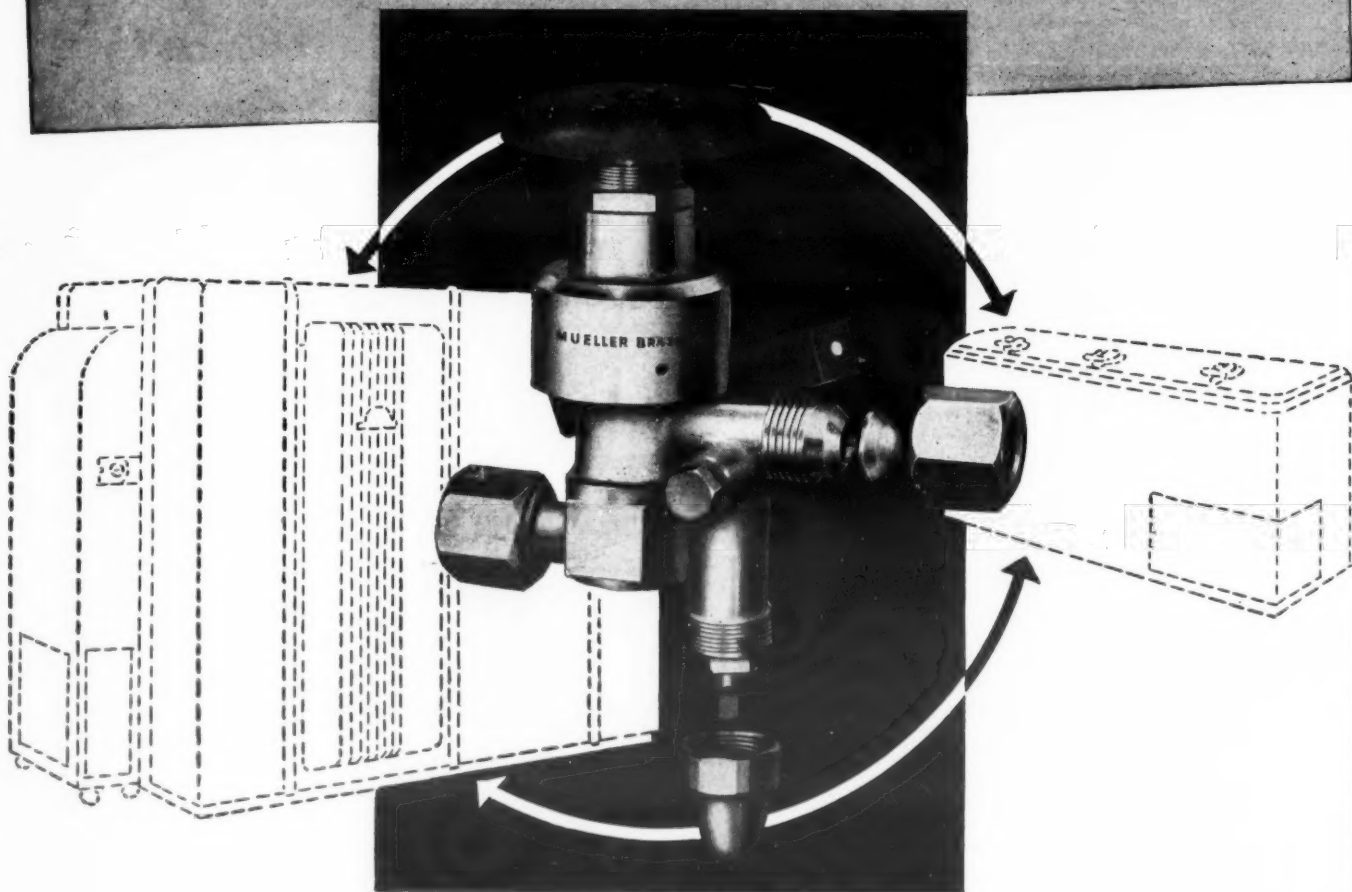
For extension cords longer than 30 ft. use the next larger size of wire than shown in Table 1.

Table 1—Minimum Wire Sizes for Extension Cords
Three Phase Squirrel Cage Induction Motors

Hp.	220 Volt		440 Volt	
	Full Load Amperes	Minimum Wire Size A.W.G. Rubber-Covered	Full Load Amperes	Minimum Wire Size A.W.G. Rubber-Covered
1	3.3	14	1.7	14
1½	4.7	14	2.4	14
2	6.0	14	3.0	14
3	9.0	14	4.5	14
5	15.0	12	7.5	14
Single Phase Induction				
Hp.	110 Volt		220 Volt	
	Full Load Amperes	Minimum Wire Size A.W.G. Rubber-Covered	Full Load Amperes	Minimum Wire Size A.W.G. Rubber-Covered
½	7.0	14	3.5	14
¾	9.4	14	4.7	14
1	11.0	14	5.5	14
1½	15.2	12	7.6	14
2	20.0	10	10.0	14
3	28.0	8	14.0	12
5	46.0	4	23.0	8

MUELLER BRASS CO.

Two-Temperature Control Valve



● The Mueller Brass Co. Two-Temperature Control Valve is used in a refrigerating system where one compressor cools more than one unit and where it is desirable to more accurately control temperatures in the various units. It closely maintains a pressure in the coil at a level above the operating pressure of the machine.

An exclusive feature of this valve is the provision for by-passing the automatic valve in case it is desired to pump all the refrigerant from the coil. By means of this by-pass arrangement, the automatic valve can, in effect, be cut out of the system and the coil opened directly to

the suction line. Provision is also made for the attachment of a pressure gauge while the line is under pressure.

There is no limit to the number of valves that can be installed on one system. When several boxes are to be maintained at different temperatures, the Two-Temperature Valves are installed on the higher temperature units.

An oval handle, which is independent of the automatic closing feature, provides manual closing and eliminates the use of a separate line valve.

Valves are furnished 1/2" and 5/8" flare.

MUELLER BRASS CO.

PORT HURON, MICHIGAN

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A. G. ZUMBRUN



A. D. SULLIVAN

Brunner --

(Concluded from Page 1, Column 3) in engineering from Cornell university, he was engaged in various phases of refrigeration work before completing his education at Cornell, at one time operating a service business in Ithaca, N. Y.

Following his graduation from Cornell, he became a development engineer for Carrier Corp. With Brunner, prior to his recent appointment, he was in charge of development research and experimental engineering.

Bendix Makes 500,000th Postwar Automatic Washer

SOUTH BEND, Ind.—The 500,000th Bendix automatic washer to be made since the War came off the line April 22, Bendix President Judson S. Sayre reported.

In less than 10 years the company has made and sold 835,000 automatic washers, the statement declared.

"At our present rate of production, we will make more than 600,000 washers in 1947, double our last year's output."

Westinghouse --

(Concluded from Page 1, Column 2) quire different treatment, including some price increases," he declared.

Mr. Clark explained that "Westinghouse is establishing this price policy in order to help give impetus to the stabilization of our nation's economy and in the hope that, with such stabilization, many projects now held up because of uncertainties over costs, may be carried out."

He declared that "Westinghouse recognizes the national need for price stability and for the lowest possible prices that will maintain a sound profit position for companies, not alone for this year but over the next few years."

"This is a requisite for all industry if our economy is to remain sound," he asserted.

He pointed out that Westinghouse prices at today's level on the average have gone up only 24.5% since 1939, while the index for all wholesale prices (excluding farm products) has gone up 56.6%.

In this same period, he noted, prices for all manufactured goods have increased 43.8% and raw materials are up 91%.

"The wage and salary level," Mr. Clark said, "was up 64% above the 1939 level, even before the recent wage and salary increases."

"Through most of this period of increasing costs," Mr. Clark explained, "Westinghouse continued its normal practice of quoting firm prices on some products—that is, the delivery price of our equipment was not increased even though our costs did increase from the time we accepted an order to the time we were able to ship the finished product."

"This was an important contributing factor to the poor earnings of the company in 1946."

"Since January of last year, however, this policy was generally changed to a basis of price in effect at the time of shipment. Uncertainty regarding costs and our unfilled order condition, which in the case of some heavy apparatus provides for deliveries as far off as three years, made this change necessary."

However, close study of the problem has resulted in the new firm price policy just announced, Mr. Clark indicated.

Contractors In Tampa Area Pave Way for Association

TAMPA, Fla.—Twenty refrigeration contractors of Tampa and St. Petersburg, Fla., met recently in Tampa with Warren W. Farr, president, National Association of Refrigeration Contractors, to discuss cooperation through an area association affiliated with NARC.

The meeting was arranged and presided over by H. B. Adams, refrigeration contractor of Tampa.

Subjects discussed of particular importance to those present were unfair trade practices by some jobbers and dairy, ice cream and beverage firms; "Freon" shortages; and the need of a refrigeration code with provisions for licensing, permits, and inspections.

York Reports Earnings For Six Months Period Up 3 Times over Year Ago

YORK, Pa.—York Corp. reports net earnings for the first six months of its fiscal year ending March 31, 1947 of \$1,005,681 or 98 cents per share of common stock, (after providing \$90,000 for quarterly dividend computed from Jan. 1, 1947 on its preferred stock).

This compares with \$353,709 or 38 cents per share of common stock for the same period last year.

Net sales were \$20,223,940 compared with \$14,222,625 a year ago.

Unfilled orders, which include contracts normally recorded as orders booked, and for service, accessory equipment, supplies and merchandise orders from distributors not recorded until shipped, totalled \$40,652,859 compared with \$30,581,663 a year ago. Orders booked during the six months amounted to \$19,876,235 compared with \$19,336,826 last year.

In commenting on these results Stewart Lauer, president, stated that while production and shipments equaled the best previous six months' record of the corporation, including the war period, continued shortages of pig iron, steel, copper, motors, and many other items in short supply; and difficulty with certain purchased components fabricated from scarce materials prevented the full utilization of plant facilities and available manpower.

He estimated that the results were at least 20% short of present plant capacity and stated that the immediate outlook for balanced production is not too bright.

Mr. Lauer also said that orders booked were not a true measure of the market potential.

B. Wood Elected Treasurer Of Minneapolis-Honeywell

MINNEAPOLIS—Brison Wood has been elected treasurer of the Minneapolis-Honeywell Regulator Co., Harold V. Sweatt, president, announced after a directors' meeting here.

Mr. Wood succeeds Willard L. Huff, who has been serving as executive vice president and treasurer. Mr. Huff will continue to serve as a director of the company and executive vice president.

Dirks Chosen Vice President, Personnel Director for Carrier

SYRACUSE, N. Y.—Election of Howard M. Dirks as vice president and personnel director of Carrier Corp. has been announced by Cloud Wampler, president.

Mr. Dirks has resigned his position as director of industrial relations of the Perfect Circle Corp. of Hagerstown, Ind., in order to take up his duties in Syracuse on May 1.

Prior to joining the Perfect Circle in 1938, Mr. Dirks was personnel manager and later a plant superintendent of Noblitt-Sparks Industries of Columbus, Ind.

New Service Manager



E. E. LANDIS

Frigidaire --

(Concluded from Page 1, Column 3) Van Scoyk will assume the responsibilities handled by Mr. Landis.

Mr. Landis has been associated with Frigidaire for 19 years. Prior to 1928 he was employed in Dayton by Delco Products Division of General Motors. His appointment as assistant service manager for Frigidaire followed in 1942.

Mr. Van Scoyk was also employed by Delco Products in Dayton prior to joining Frigidaire in 1929. He was appointed assistant service manager in charge of the technical section in 1945.

Television --

(Concluded from Page 1, Column 4) vided over a network including WPTZ in Philadelphia, WTTG in Washington, D. C., and WRGB in Schenectady. The 26-week contract also provides for adding other television stations as they can be linked to the network.

"We are thoroughly convinced of the great future of television, which is becoming an increasingly important entertainment and advertising medium," Mr. Coward said, "and we believe that just as it has every possibility of becoming the leading entertainment and information vehicle, it can become a powerful tool of advertising and merchandising, if it is judiciously employed by the advertiser."

"We have been studying and working with television since our first program several years ago, and we plan to continue this developmental work so that we may be in the best position to serve the interest of the consumer and our retailers as television becomes generally available to the public."

Mrs. Kitchell, recently elected president of the Women's Broadcasters Association, is well-known to homemakers from coast-to-coast for her "Woman's Exchange" program which she broadcasts five days a week over WJZ and the American Broadcasting System. She has conducted this program for several years, in addition to other network programs during the past 16 years.

Geyer, Newell & Ganger handle the account, and the program will be produced under the direction of Donald Shaw, vice president and radio director of the agency.

No. 200 WD Wall Diffuser

Now Ready for that big job!

IMMEDIATE DELIVERY

ROUNDED FRONT * TWO FANS

Properly cooled, modulated air flow sweeps every part of the refrigerator giving uniform spot temperatures and maintains correct relative humidity. Floor, wall and refrigerator contents stay dry and sanitary. Completely automatic. Handsome, durable, rust-resistant finish. Heat exchanger included. Write for data sheet and catalog of complete M&E Line of wall and ceiling diffusers.

M&E EST. 1855

Desirable Territory Open for Responsible Distributors

Manufactured by
MERCHANT & EVANS CO.
Philadelphia 46, Pa.

Cooling Coils • Case Coils • Condensers

MEANS... Profit Making, Labor Saving Equipment

WITH THIS SPACE WE COULD HANDLE A LOT MORE BUSINESS, BILL!

YES MARY, BUT HOW CAN WE GET MORE CUSTOMERS?

WHO'S THAT LITTLE GUY, MARY?

I AM E.T. FROST! GOOD ICE CREAM ALWAYS BRINGS MORE CUSTOMERS, AND ICE CREAM IS EASY TO MAKE WITH V EQUIPMENT!

SO BILL AND MARY PUT IN V EQUIPMENT--AND YOU SEE ANOTHER DELIGHTED E.T. USER AND A PLEASED E.T. DEALER!

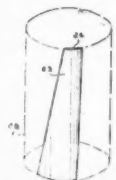
Emery Thompson MACHINE AND SUPPLY CO.
PIONEERS IN ICE CREAM FREEZER DEVELOPMENT FOR OVER 40 YEARS
1349 Inwood Avenue, New York 52, N. Y.

E.T. 40 QT. FREON FREEZER

PATENTS

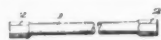
Weeks of Feb. 18 & 25

2,415,847. COMPRESSOR APPARATUS. Arnold H. Redding, Swarthmore, Pa., assignor to Westinghouse Electric Corp., East Pittsburgh, Pa., a corporation of Pennsylvania. Application May 8, 1943, Serial No. 486,142. 10 Claims. (Cl. 230-132.)



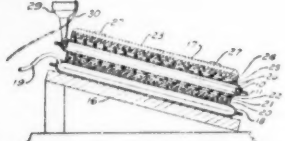
1. In an axial-flow compressor or blower, blading wherein each blade is of circular segment section from the root to the tip, has a convex face whose root and tip radii are the same and has a chordal face inclined toward the convex face from the root to the tip.

2,415,865. METHOD OF MAKING HEAT EXCHANGERS. Harry T. Booth, Glencoe, Ill., assignor to United Aircraft Products, Inc., Dayton, Ohio, a corporation of Ohio. Application Jan. 19, 1943, Serial No. 472,885. 3 Claims. (Cl. 29-157.3.)



1. The method of making a heat exchanger wherein a plurality of tubular members having enlarged ends, and through and around which a coolant medium and fluid to be cooled respectively flow, and a plurality of tube separating baffles are stacked in superposed relation in a retaining shell, which consists in producing a plurality of sub-assemblies of the tubes, such sub-assemblies of tubes being of widths to fit within predetermined widths of the area defined by the retaining shell but of less thickness than the height of the area defined by the retaining shell, stacking the sub-assemblies of tubes and separating baffles in superposed relation to provide a bundle of tubes and baffles substantially corresponding to the area of the retaining shell, inserting the sub-assemblies, the baffles, and the retaining shell together to form an integral whole.

METHOD OF MAKING HOLDOVER REFRIGERATION PLATES. Orton S. McGuffey, Lansing, Mich., assignor to Kold-Hold Mfg. Co., Lansing, Mich., a corporation of Michigan. Application Feb. 6, 1943, Serial No. 474,949. 5 Claims. (Cl. 62-170.)



5. The method of making hold over refrigeration plates which comprises providing a tank having therein a refrigerant evaporator coil, said tank having opposed flexible side walls of relatively large area and having a filler opening adjacent one edge thereof, positioning said tank with the filler opening located above the remainder of the tank, introducing liquid into the tank through said filler opening until the tank is completely filled, applying external pressure against the side walls of the tank to decrease the volume of the tank and expel some liquid there-

from, thereafter sealing the tank from the atmosphere while the tank is under the influence of said external pressure, and finally releasing the pressure from said side walls.

2,416,017. REFRIGERATOR CABINET. Earl E. Nofzinger, Greenville, Mich., assignor, by mesne assignments, to Gibson Refrigerator Co., Greenville, Mich., a corporation of Michigan. Application Aug. 21, 1943, Serial No. 499,474. 1 Claim. (Cl. 220-9.)



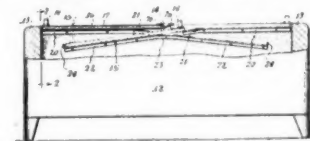
A refrigerator cabinet wall structure comprising a front wall member formed of insulating material, an outer casing member, and a liner member spaced from and parallel to said outer casing member, said front wall member having a rearwardly extending flange at its laterally outer edge and a forwardly opening rabbet at its laterally inner edge, the front portion of said outer casing member overlying said flange and secured thereto with extreme forward extremity of said casing member spaced from said flange, said liner member having a laterally outwardly extending flange seated in said rabbet, means connecting said liner flange to said front wall member and separate mouldings overlying the liner flange and the forward extremity of said casing member.

2,416,119. EXTENSIBLE ICE TRAY GRID. Donald H. Reeves, Dayton, Ohio, assignor to General Motors Corp., Dayton, Ohio, a corporation of Delaware. Application Aug. 5, 1937, Serial No. 157,575. 15 Claims. (Cl. 62-108.5.)



15. A grid for ice cube trays comprising, a series of separate divider sections arranged in succession to form a grid, each section including a first wall portion providing the grid with a longitudinal partition and a second wall portion extending laterally from said first wall portion to form a plurality of spaced apart partitions along the length of said longitudinal grid partition, each section being directly connected to its adjacent section to provide a unitary structure, and the connection of said sections being constructed and arranged to permit movement of the sections relative to one another.

2,416,132. CLOSURE DEVICE FOR BOTTLE COOLERS AND THE LIKE. Kermit K. Watson, Morrison, Ill., assignor to Ice Cooling Appliance Corp., Morrison, Ill., a corporation of Delaware. Application May 25, 1944, Serial No. 537,221. 4 Claims. (Cl. 220-41.)

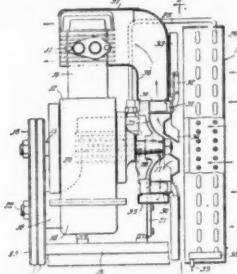


1. In a container having a substantially horizontal frame open at its top, a pair of complementary lids adapted to close opposite ends of said frame opening, and means for supporting said lids in said frame consisting of a pair of opposed horizontally disposed rails extending inwardly from each end of said frame and terminating with downwardly inclined portions adjacent the center of said frame, and a pair of secondary rails inclined downwardly in opposite directions from below the inner ends of said horizontal rails substantially in alignment respectively with the inclined terminal portions of the latter, said secondary rails being spaced from said inclined portions to permit either of said lids to be swung freely upwardly about its inner edge or slid edgewise along the inclined rails beneath the opposite lid.

2,416,153. AIR CIRCULATION SYSTEM FOR REFRIGERATING APPARATUS. Philip E. Cary, Perryville, Md., and Lloyd F. Overholt, Riverside, Carl J. Johnson, Chicago, and William F. Borgerd, Riverside, Ill., assignors to International Harvester Co., a corporation of New Jersey. Application Nov. 29, 1943, Serial No. 512,108. 3 Claims. (Cl. 62-115.)

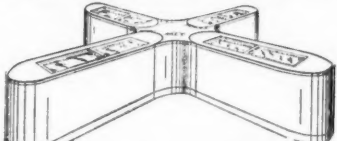
1. In a refrigeration unit including an air cooled engine, a compressor, and a condenser, said condenser being spaced from said engine, and in combination therewith, an air circulation system comprising a fan connected to be driven by the engine and positioned between the engine and the condenser, said fan having circumferentially spaced axially extend-

ing blades for radially discharging air, means for conducting said air to the engine, said fan also being provided with



radially and outwardly extending fan blades for drawing air through the condenser and discharging it toward the engine, and said fan being provided with radially and inwardly extending blades positioned to draw air through the condenser and to deliver it to the circumferentially spaced blades.

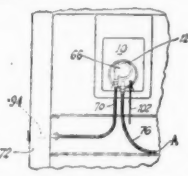
146,369. DESIGN FOR A FROZEN FOOD MERCHANDISING UNIT. Arthur



T. Millott, Minneapolis, Minn. Application Jan. 11, 1946, Serial No. 125,452. Term of patent 14 years. (Cl. D80-11.)

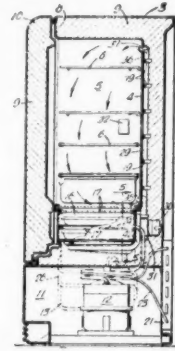
The ornamental design for a frozen food merchandising unit, as shown and described.

2,416,326. ICE-CREAM FREEZER. Leroy H. Knibb, Sabot, Va. Application Nov. 6, 1942, Serial No. 464,822. 15 Claims. (Cl. 62-114.)



1. In an ice cream freezer adapted to be inserted into the ice compartment of a refrigerator, a container for an edible to be frozen, a driving motor attached to said container, a housing enclosing the motor, a fan within the housing, a tube or conduit leading from a position within the food compartment of the refrigerator to the housing on the intake side of the fan, means whereby the intake side of the fan is in communication with a portion of the housing adjacent the container so that the air impelled by the fan will flow from that position away from the freezer and toward the motor, and a conduit or tube leading from the housing at a position remote from the container and constructed and arranged to discharge the motor heated air through the refrigerator wall to the atmosphere.

2,416,354. CONTROLLED HUMIDITY REFRIGERATOR. Malcolm G. Shoemaker, Abington, Pa., assignor, by mesne



1. In a refrigerator having a walled portion defining a high humidity food storage compartment, first cooling means in heat exchange relation with walls of the compartment and adapted to maintain said compartment at non-frosting temperatures, second cooling means providing heat transfer capacity in addition to that provided by said first cooling means, and means responsive to humidity condition within said compartment for effecting intermittent forced circulation of the compartment air in heat exchange relation with said second cooling means to condense moisture from said air and to cause the temperature of the air in said compartment to approach that of the walls thereof.

CLASSIFIED ADVERTISING

RATES for "Positions Wanted" \$2.50 per insertion. Limit 50 words.

RATES for all other classifications \$5.00 per insertion. Limit 50 words.

ADVERTISEMENTS set in usual classified style. Box addresses count as five words, other addresses by actual word count.

POSITIONS WANTED

REFRIGERATION ENGINEER, 41. with outstanding 14 year record. Capable of assuming responsibility for product improvement or new product program. Versed in design, research and application problems. Three patents granted on refrigeration controls. Connection with future wanted in Southwestern United States. BOX 2322, Air Conditioning & Refrigeration News.

DEPENDABLE VETERAN, age 26. Completed 44 weeks Government approved refrigeration course—commercial, domestic, air conditioning experience, very interested in this field, prefer to work with or for well experienced man, central or western state. Have car and tools. BOX 2326, Air Conditioning & Refrigeration News.

SERVICE MANAGER—familiar with commercial and domestic operations. Now employed in this capacity, with 43 men under my supervision. Fully capable of handling distributor or contractors service profitably. Know all the details of service operation and management. Am courteous and efficient. 20 years refrigeration experience. BOX 2329, Air Conditioning & Refrigeration News.

REFRIGERATION SALES engineer, seeks connection as representative with manufacturer or distributor of light tonnage air conditioning or refrigeration equipment. Background of sales merchandising coupled with engineering design, layout and load calculation. Desires sales opportunity California or Southwest. A.S.R.E. Associate. BOX 2330, Air Conditioning & Refrigeration News.

EXECUTIVE OR sales—graduate engineer, age 34, well-rounded experience in responsible and supervisory positions in manufacturing, design, engineering, and sales. Past three years in low temperature refrigeration. Employed at present, excellent references. BOX 2334, Air Conditioning & Refrigeration News.

POSITIONS AVAILABLE

REFRIGERATION ENGINEER—for commercial refrigeration and air conditioning department. 22 to 28. Engineering graduate preferred. Refrigeration experience desirable but not essential. Excellent opportunity—advancement assured. State age, present occupation, education, past experience. Address reply in writing only to Mr. G. H. Poggen, FRIGIDAIRE SALES CORP., 4584 Maybury Grand, Detroit 8, Mich.

WANTED: TWO first class refrigeration servicemen on Supercold and Frigidaire commercial equipment. Prefer men who have also had some domestic refrigeration experience. Reply HARTMAN BROS. LTD., 842 South First St., San Jose, Calif.

EXPERIENCED COMBINATION commercial, refrigeration, application engineer and service manager wanted, for Frigidaire dealer. On annual salary basis. MILLER ENGINEERING CO., 118 N. Winnebago St., Rockford, Ill.

REPRESENTATIVES WANTED. For our line of WK products. Charging lines, flaring tools, S.A.E. fittings, bottled gas fittings and steel fittings for industrial equipment. WINN & KUHN CO., 1833 Nicollet Ave., Minneapolis 4, Minn.

WE HAVE openings for a limited number of experienced men to sell the full line of York commercial products in this territory. We want men of high caliber who can earn \$9000 against drawing account, or more yearly. YORK DISTRIBUTORS, INC., 11-30 46th Road, Long Island City 1, N. Y.

EXPERIENCED COMMERCIAL refrigeration and air conditioning salesman to represent outstanding dealer in Eastern North Carolina. Salary and commission. Write giving previous experience and references. P. O. BOX 48, Raleigh, N. C.

CHIEF DRAFTSMAN and senior layout draftsman with large commercial manu-

facturer in Middle West. Experience in domestic or commercial cabinet construction. Knowledge of refrigeration helpful but not necessary. Excellent opportunities for advancement. Give full details of experience and state salary desired. BOX 2324, Air Conditioning & Refrigeration News.

WANTED REFRIGERATION and air conditioning sales engineer. Car necessary. Prefer man of experience and proven record of ability in sales engineering work. Position is with refrigeration and air conditioning contractor in South California with exclusive distribution on many items. Our employees know of this advertisement. BOX 2328, Air Conditioning & Refrigeration News.

WANTED: REFRIGERATION sales engineers to contact refrigeration jobbers in Southeastern, Southern, Eastern and Midwestern states. Must know application of commercial refrigeration, lowside and jobber relations. Our products are widely known and advertised and are now being sold through refrigeration jobbers nationally. BOX 2335, Air Conditioning & Refrigeration News.

EQUIPMENT WANTED

WANTED ICE cream coin operated vending machines. New or used—any quantity cooled by dry ice or electric refrigeration. If available contact REFRIGERATION SPECIALTIES, INC., 721 Flushing Ave., Brooklyn 6, N. Y. Evergreen 4-0311.

EQUIPMENT FOR SALE

MOTORS and condensing units—available at once—1/4-1/2-3/4-1 hp. Universal condensing units with or without motors. Special—six hole ice-cream cabinets with 1/4 hp. Copeland units less motors \$225. Also beverage coolers, beer equipment, stainless steel reach-in freezers. ALBROD CORP., 319 West 48th St., New York City 19, CI 6-9100.

5 UNITS ARMY surplus used for cooling radar tubes. Suitable for air conditioning units, unit heaters. Radiator 28 inches square. Large ILG blower. Ingersoll-Rand motor pump. Cost Government \$950.00. Complete with thermostat controls, thermometer, \$175.00—\$50.00 deposit with order. Shipping weight 1000 lbs. ALL OFFICE MACHINES CO., 4636 W. Washington—Chicago, Ill.

IMMEDIATE DELIVERY—new air conditioning equipment. Weathermakers complete with motor, "Freon" coil, etc. 2 ton to 25 ton. SWSI, DWDI, and twin centrifugal blowers, propeller fans, heating and cooling coils, evaporative condensers, self-contained air conditioning units, condensing units. CONTROLTEMP CORP., 236 Butler St., Brooklyn 17, N. Y.

FOR SALE—AC motors 1/2 to 3 hp. single and 3 phase, list price. Immediate delivery. EDISON COOLING CORP., 310 E. 149th St., Bronx 51, N. Y.

BEER DISPENSING equipment—direct draw systems, 3-4-6 keg capacity. Beverage coolers, beer dispensers for air-duct and Temptrix systems. Beer pumps. Immediate deliveries. Dealers wanted for New Jersey, New York and Pennsylvania. EXCELSIOR MACHINE CO., 2601 Kutztown Road, Reading, Pa.

QUALITY BOBTAIL fountains; reach-ins, walk-in boxes—wood, metal; dough retarders; double duty cases—stainless steel, porcelain; dairy, florist, bakery cases; ice cream hardening cabinets; thermopane frozen food cases; milk, sandwich coolers; stainless steel back bars; with machines. Equipment made to special order. FRIGITEMP CORP., 931 Bergen St., Brooklyn 16, MA 2-8093.

IMMEDIATE DELIVERY on five 1 HP Z100F Servel air cooled condensing units. \$295.00 each. GENERAL TRADING CO., Box 1000, Danville, Va.

1 HP MEAT and bone cutter machines. Popular make complete with single phase motors. Brand new in original factory crates. Immediate delivery. HARRIS COMMERCIAL REFRIGERATION CO., 123 North Perry St., Attica, Ind.

1000 MOTORS, FOR sale, from stock 1/2 hp.—3425 RPM—3 ph/230 V. (Under-rated—easily equal to 1/2 hp.) Ballbearing, for vertical or horizontal. Enclosed Fr. 1/2 in. shaft. \$36 each. This rugged

motor cannot burn out. (Glass insulated wire coils.) MODERN SUPPLY CO., 206 Fulton St., New York 7—CO 7-0100.

IMMEDIATE SHIPMENT—new design, dry-cooled self-contained combination bottle cooler and refrigerator cabinets. Double purpose—cools bottles in upper section, foods below. High capacity in small floor space. Baked-on white gloss finish. Sliding tops on stainless steel tracks. POWERS EQUIPMENT CO., Jenkintown, Pa.

CAPILLARY TUBES, Part No. 1140. One model fits all household units up to and including 1/2 HP SO2, Methyl, "Freon." Has proper inside diameter and length, thus allowing unit to operate satisfactorily without high head pressure. \$1.10 each. Write for bulletin No. 14 listing parts for sealed units. SEALED UNIT PARTS CO., 3097 Third Ave., New York 56, N. Y.

FLOAT REPLACEMENTS. For replacing defective high side floats on all household units. Regular charging connection, capillary tube setup, internal strainer and exact mounting plate. Part #2000—Westinghouse (4 hole plate), and #2010 (3 hole plate). Part #2020—Gibson Part #2030—General Electric (DR-1 & DR-2). Part #2040—For general replacement (undrilled plate). \$6.75 each. SEALED UNIT PARTS CO., 3097 Third Ave., New York 56, N. Y.

SEALED CROSLLEY TERMINALS. Installed from the outside in a few minutes without opening the compressor. Corrects leaky terminals on all Crosley "F-12" units. Set of three \$6.75 (Part No. 1020). Installation tool \$1.65. Immediate delivery. Money-back guarantee. SEALED UNIT PARTS CO., 3097 Third Ave., New York 56, N. Y.

ATTRACTIVE REVOLVING food sign—complete with alphabetical letters and price tags. Enabling to make your own listings. (1) Will increase sales on freezers. (2) Added revenue for your salesmen and servicemen. Available to the trade only, write for our liberal discounts. M. S. SHORE, 1985 Nostrand Ave., Brooklyn 10, N. Y.

FAN BLADES—immediate delivery—Torington B series, size 24"-30"-36"-48"-40 pitch, unpainted 1/2" bore, all new in original containers. VALLEY FAN MFG. CO., Box 206, Fort Valley, Ga.

FOR SALE—immediate delivery—copper tubing. 3/4" x .035 W x .305 LD—up to 50,000 lbs.—50 ft. coils sealed ends. 1/2" x .35W x .430ID—up to 50,000 lbs.—50 ft. coils open ends—also 3/4"-1/2"-1/4" x 1/4"-1/4" F.O.B. Phila. Pa. BOX 2320, Air Conditioning & Refrigeration News.

FOR SALE: Chrysler 50 ton model 10H—220V—AC radial compressor, 50 ton evap. cond. and three air handlers 15 tons each. This equipment from deactivated air base operating at time of removal. Original net price \$7500—will sell for \$2100. BOX 2333, Air Conditioning & Refrigeration News.

FRANCHISES AVAILABLE

LOW COST automatic fire extinguisher. Exclusive county rights available for the Marvel automatic Kill-Fyr extinguisher. Component parts approved. Easy sales, good profits. Write for descriptive circular and facts from satisfied users. KILL-FYR MANUFACTURING CO., Dept. R-88, Camden, N. J.

BUSINESS OPPORTUNITIES

EXCELLENT OPPORTUNITY for business man of high calibre to become connected with well established air conditioning and commercial refrigeration business. Need a partner to take charge of the commercial refrigeration department. Franchised with the leader in our field. Indiana city near Chicago. \$20,000.00 will handle. BOX 2327, Air Conditioning & Refrigeration News.

APPLIANCE and furniture business established 15 years in Ohio city of quarter million. Best appliance franchises. Highly profitable operation. Present volume \$200,000 per annum. Downtown building, 4 years to run, 10,000 square feet usable space. Retiring owner will sell only to high grade operator. BOX 2331, Air Conditioning & Refrigeration News.

FOR SALE: Commercial and domestic sales and service near Los Angeles, City of \$15,000—no competitor—good franchises, consistent earning record. Good building in excellent location with good lease. Stock and fixtures \$17,500.00. Reason for selling—other interests. BOX 2332, Air Conditioning & Refrigeration News.

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COMMERCIAL

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Refrigeration and
Air Conditioning
Requirements

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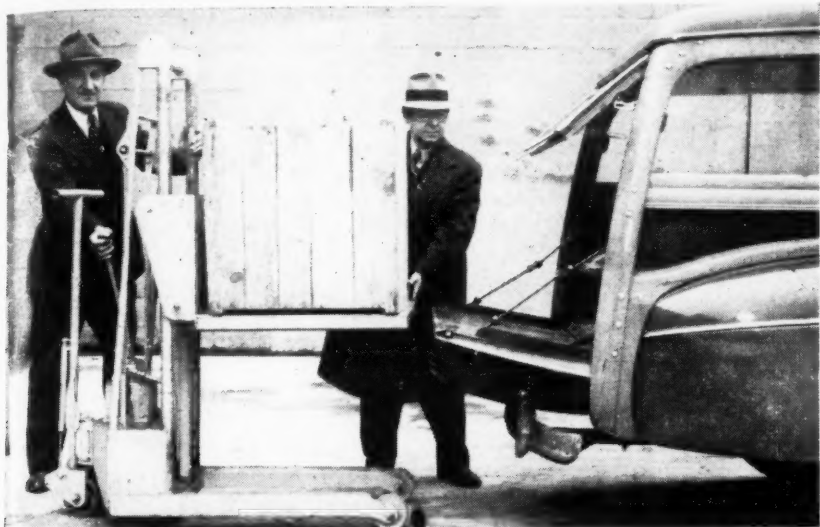
Company.....

Street.....

City.....Zone.....State.....

4/28/47

Hydraulic Truck Aids Parts Wholesaler



Using his new portable, hydraulic lift truck, Leon Young (left), Detroit parts wholesaler, helps W. T. Heaney, contractor, load a heavy piece of equipment. The truck was purchased when Young Supply Co. moved into a new 6,000 sq. ft. building at 860 W. Baltimore to make way for a new superhighway which will cut through the former location. The new location also provides parking space in the rear of the building.

Perfection Stove Names 1st Woman Publicity Manager

CLEVELAND—With her appointment as publicity manager of Perfection Stove Co. here, Mrs. Alice Holton became the first woman to hold that post in the 50-year history of the firm, the company has announced.

Her job will be to publicize Perfection, Ivanhoe, and Superflex oil-powered cooking and heating appliances, according to the company. She will work under the supervision of Norman E. Olds.

Flynn Becomes North Central Regional Manager for Crosley

CINCINNATI — Appointment of Joseph P. Flynn as north central regional manager of the Crosley Division, Avco Mfg. Corp., has been announced by S. D. Mahan, general sales manager.

Mr. Flynn, whose headquarters will be in Milwaukee, will cover Wisconsin, Minnesota, North and South Dakota, and parts of Michigan and Illinois.

Mr. Flynn has been in the appliance sales business since 1924.

Horne Appliance Co. Formed

LOS ANGELES—W. E. Horne Appliance Co., Inc. has been formed in Los Angeles County, with a capital of \$25,000. Directors are: W. E. Horne, Paul Saylor, and H. A. Gertsch, all of North Hollywood.

Food Conservators Is Our Only Business

All our energy and resources are devoted to their development and production. Write for particulars.

Master Manufacturing Corp.
121 Main St. Sioux City, Iowa

800,000

Master Food Conservators in Use

PAR REFRIGERATION EQUIPMENT

Tops in
PERFORMANCE
ECONOMY and
EFFICIENCY

By Comparison—You'll Buy PAR
Par Manufacturing Corporation
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Allen-Bradley Appoints Mellon Chief Engineer

MILWAUKEE—J. J. Mellon, associated with the Allen-Bradley Co. for the past two years, was recently appointed chief engineer. He will take over duties formerly directed by Gustav O. Wilms, who has gone into semi-retirement.

Active in the development of industrial electric control equipment since his graduation from Rensselaer Polytechnic Institute in 1923, Mr. Mellon formerly held engineering and executive posts at Westinghouse and Clark Controller Co. He has also been active on the engineering and advisory committees of the Industrial Control section of the National Electrical Manufacturers Association.

Reynolds Issues Book, 'Finishes for Aluminum'

LOUISVILLE, Ky.—"Finishes for Aluminum," a book published by the Reynolds Metal Co. here, discusses combinations of surface finishes for enhancing the appearance of aluminum.

The book is made up in two volumes. The first one describes various forms of the following: cleaning treatments, mechanical surface finishes, chemical surface finishes, electrolytic oxide treatments, electroplated coatings, paint application methods, paint coatings, ceramic coatings (vitreous enamels), and special finishes. This volume concludes with a discussion of controls and tests for finishes.

The second volume, a loose leaf booklet to allow addition of material, deals with shop data on materials, equipment, solution preparation, procedure, and control for many of the most widely used finishing processes.

Arizona Contractors Name Head

PHOENIX, Ariz.—Arizona Refrigeration Contractors Association, successor to Arizona Refrigeration Association, has elected new officers for 1947 by action of the board of directors, announced recently, as follows:

President, Ace Lance; vice president, Burke Patterson; secretary-treasurer, Kenneth Nash; sergeant-at-arms, Harlan Diehl.

Display Shows Piping Arrangement



This floor display setup for use by Frigidaire dealers, depicting the "freezing cold," "moist cold," and "super moist cold" sections of the Frigidaire "Cold Wall" models, is of interest generally, because it shows the refrigerant piping arrangement in the "Cold Wall" models. (Note the piping shown in the "phantom view" of a refrigerator which is part of the floor display piece.)

\$16,763,650 G-E Profit For 3 Mos. Nets 58-Cent Dividend on Common Shares

SCHENECTADY, N. Y.—General Electric Co.'s profit available for dividends for the three months ended March 31 amounted to \$16,763,650, or 58 cents a share of common stock, President Charles E. Wilson announced at the annual meeting of the company's stockholders.

He stated that this net income reflected the receipt of \$5,306,835 of nonrecurring income resulting from the liquidation of Electrical Securities Corp., an investment affiliate. In the corresponding period last year the company's operations resulted in a loss of \$13,701,580, or 47 cents a share, due to a strike which closed all of its principal plants.

"Net sales billed in the first quarter of 1947 totaled \$233,819,167, compared with \$257,638,780 billed in the final three months of 1946," Mr. Wilson stated.

Westinghouse Appliance Div. Promotes Kline

MANSFIELD, Ohio—Appointment of Will M. Kline, Jr., as assistant sales promotion manager for the Westinghouse Electric Appliance Division, has been announced by Roger H. Bolin, manager of appliance advertising.

Mr. Kline was supervisor of water heater and kitchen utilities advertising. His new duties will include responsibility for the Westinghouse kitchen-laundry planning program.

Kramer Chosen To Head Sales At West Coast Appliance Firm

FRESNO, Calif.—A. F. Kramer has been appointed sales manager of the Delvin-Drew Co., radio and appliance firm here, R. E. Drew, member of the firm, announced recently.

Mr. Kramer has been in the appliance field for approximately 20 years. He recently received his release from the U. S. army engineers.

it's Perfect
it's Dependable
it's a

General Refrigerator

Stainless Steel Exterior & Interior Complete with Unit

We MANUFACTURE a complete line of:

- HOME & FARMS FREEZERS
- DRY BEVERAGE COOLERS
- DAIRY WALL CASES
- STAINLESS STEEL REACH-INS
- AISLE DISPLAY CASES

IMMEDIATE DELIVERY
EXPORTERS! DEALERS!

Investigate this Superior
"Quick Moving" Line.

GENERAL REFRIGERATORS CORP.

678 Broadway, New York 12, N.Y.
WRITE FOR CATALOG "AC3"

Code Hits Kick-Backs, Salesman Piracy--

(Concluded from Page 1, Column 3)
matters of mutual interest, benefit, or concern.

"3. To appear for the members of the association before governmental agencies and other bodies in regard to matters affecting the business.

"4. To do anything necessary and proper for the accomplishment of any objects herein set forth, or which shall be recognized as proper and lawful objectives, all of which shall be consistent with the public interest, as well as in the interests of this business.

"5. To encourage its members in establishing and conducting attractive and outstanding places of business.

BETTER TRADE RELATIONS

"6. To encourage and bring about more friendly relations between its members and others engaged in the refrigeration industry.

"7. To cooperate in the development of a national refrigeration code establishing proper standards for refrigeration material as well as its installation.

"8. To elevate the standards of refrigeration installation, and to cooperate with the proper inspection authorities for the maintaining of proper standards and the development of licensing codes and ordinances.

"9. To cooperate with other national associations in problems of trade relations, merchandising policies, and in the improvement of service to the public.

RULES OF THE GAME

"10. To develop a code of ethics to be used as a set of rules in the game of competition between commercial refrigerator dealers at the distributor's levels.

"11. To develop and disseminate information and sound business practice and procedures needed for successful operation by members of the industry at the distributor's level.

"12. To conduct research and disseminate facts as determined on problems involved in the development of sound business practices at the distributor level for selling to various groups of buyers.

"13. To establish a standard practice in handling trade-ins."

The code of ethics is comprised of the following 12 points:

"1. Members shall at all times strive to maintain cordial and friendly business relations with all persons associated directly or indirectly with our industry.

ATTRACTIVE BUSINESS PLACES

"2. Members shall provide and maintain attractive and efficient places of business with adequate service facilities for their customers. By so doing, our business standards will be greatly enhanced.

"3. Members shall practice fair and honorable competition and at all times try to establish higher ideals of business morality.

"4. No member shall make false and disparaging statements or circulate rumors respecting a competitor, nor shall he solicit the cancellation of, or knowingly accept, orders previously placed with competitors in good faith by their customers.

"5. For one member to seek to engage the services of another member's salesman for the purpose of weakening that member's sales organization shall be deemed highly unethical.

"6. No member, individually or collectively, shall engage in any practice contrary to law or to the public welfare.

AID CUSTOMER BUYING

"7. Members' salesmen shall be trained to be of maximum service to their customers. Under no circumstances should overselling or underselling be tolerated. The customer should at all times be given the benefit of the salesman's qualified experience and counsel in selecting equipment best suited to his requirements.

"8. Contracts with customers shall be so made that all parties to the contract are mutually benefitted and their terms shall be faithfully carried out.

"9. All advertising by members shall be based on facts with no misrepresentation of their products, prices, or business policy.

"10. No member shall offer inducement or render service to a customer that is not fully and adequately included in the term of sale.

"11. No member shall make allowance for equipment taken in trade that will exceed the amount specified in the contract of sale, and such allowances shall be based on sound business practices. No kick-back or side payment shall be permitted.

COMMITTEE TAKES DISPUTES

"12. Any disputes arising out of infractions or alleged infractions of the code of ethics set up by the association governing the conduct of its members shall, if the parties fail to agree, be submitted to an arbitration committee appointed by the association, and the decision of such committee shall be final."

Four classes of members are recognized by the association: charter

members, regular members, associate members, as well as honorary members.

The terms "charter" and "regular" members are limited to those corporations, firms, partners, or individuals who are active in the sale of commercial refrigerators and who represent or purchase directly from the manufacturer.

Associate membership takes in those firms or individuals actively engaged in the sale of commercial refrigerators who do not purchase from, or directly represent, the manufacturer.

CHARTER MEMBERS PAY \$60

Charter and regular members pay \$60 annual dues; associate members, \$30.

A 12-man board of directors, which next year will be chosen partly on a

regional basis, aids the officers in conducting association affairs.

Besides President Herman and Secretary Edmundson, the officers include H. B. Adams of Tampa, Fla., vice president, and Harry A. Hattenbach of Cleveland, treasurer.

BOARD OF DIRECTORS

Members of the board of directors are:

W. C. Bader of Tulsa, Okla.; M. David Dubb, Washington, D. C.; J. W. Jennings, Greenville, S. C.; Z. O. Jennings of Little Rock, Ark.; Walter Jones, Raleigh, N. C.; Charles A. Kohl of St. Louis; Gordon W. McWilliams, Atlanta; Charles E. Rogers, San Mateo, Calif.; I. W. Shell, Chicago; Charles Q. Sherman, New York City; Thomas H. Sullivan, Houston, Tex.; and C. S. White of Cincinnati.

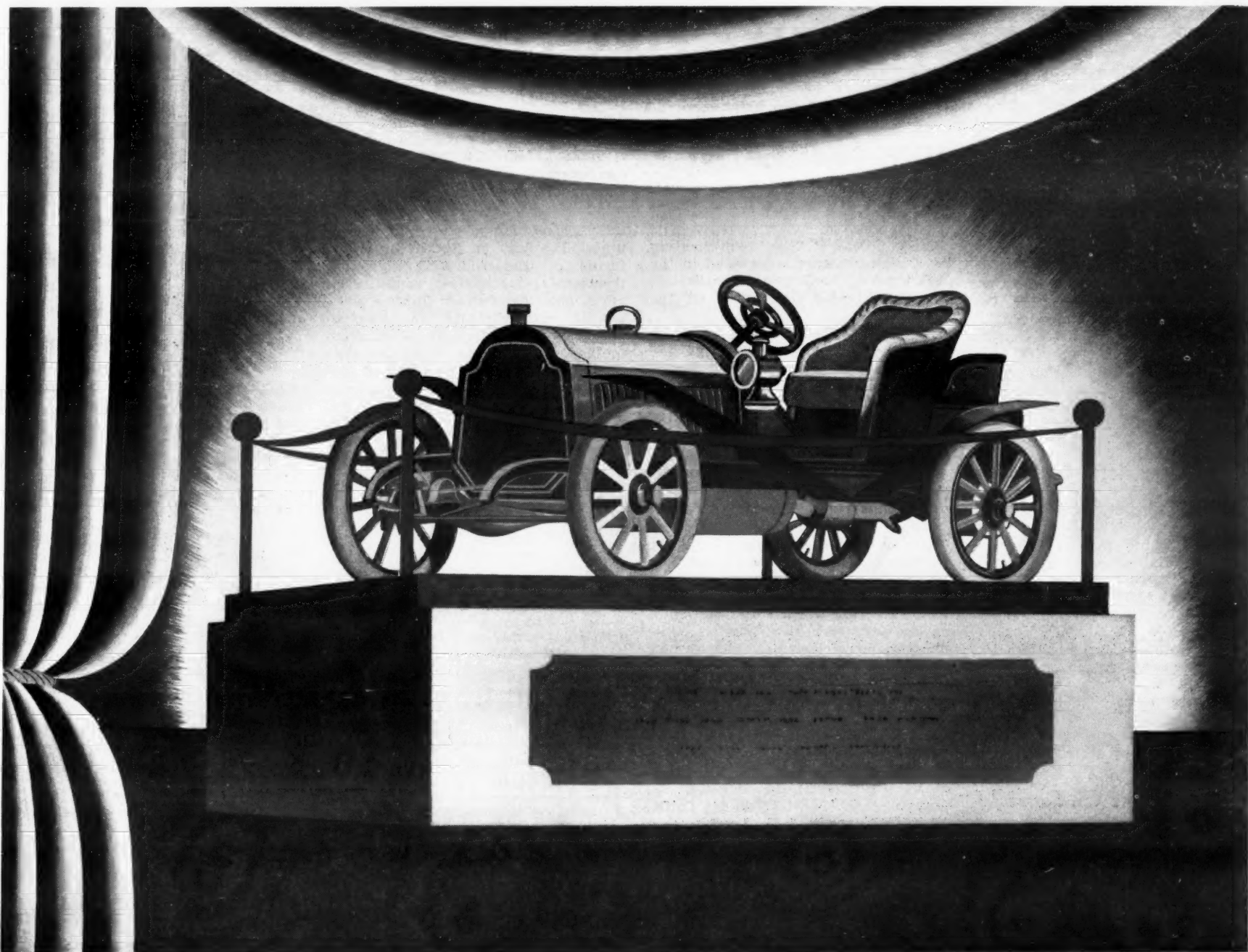
WAA Offers \$35 Million Worth of Furnaces, Ovens

WASHINGTON, D. C.—An estimated \$35,000,000 worth of heat treating furnaces and ovens are currently being offered for sale in various parts of the country by the War Assets Administration, it is reported here.

Prices are said to range from 36 to 75% of acquisition costs, which in turn range from \$500 to \$250,000.

Offered are foundation and portable type furnaces for heat treating metals and heating and reheating specialties, and ovens for enameling, japanning, and lacquering. The number on sale is estimated at 10,000.

Large inventories are in the possession of WAA regional offices.



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BUSH

OUR FORTIETH YEAR

Back in 1907, a refrigeration system consisted of a compressor and many feet of two-inch iron pipe. It was inefficient, costly, bulky.

But the 1907 automobiles had efficient cooling systems . . . finned-coil radiators with power-driven fans. And Bush, who was building these radiators, saw how the same principles could be applied to commercial refrigeration systems.

So Bush began building finned-coil evaporators and condensers. They adopted the automobile's power-driven fan to increase efficiency and reduce size.

Today . . . 40 years later . . . every modern refrigeration system employs the finned coil. And today Bush builds a substantial part of all low-side commercial refrigeration equipment.

Bush products are sold by leading refrigeration wholesalers everywhere.

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